Ministry of Foreign Affairs

IOB Evaluation

Policy review of Dutch aid policy for improved water management, 2006-2016

Mozambique country study

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Preface

This Mozambique country case study was conducted in the framework of a policy review of Dutch aid policy for improved water management over the period 2006 to 2016. The study was led by Dr Stephen Turner, who also wrote the case study report. As part of the study a three-member evaluation team visited Mozambique from 12 to 26 March 2017. The team comprised Dr Turner, Pim de Beer, policy evaluator at the Policy and Operations Evaluation Department (IOB) of the Dutch Ministry of Foreign Affairs, and Mr Belis Matabire, senior Mozambican water expert.

The evaluation team is very grateful for the patient support of the many informants who helped to provide documents, information and opinions, in Mozambique and the Netherlands. People met, either in person or through Skype or phone calls, are listed at Annex 4.

The team especially thanks the Netherlands Embassy in Maputo for all the hospitality and assistance they received – in particular, from Dr Antje van Driel, senior policy adviser water and sanitation. Special thanks also go to Ir Katrien van Krieken, independent professional at the Department for Water and Sanitation, for her much appreciated support to the preparation and the conduct of the field mission.

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List of abbreviations

ARA	Administração Regional de Aguas
ASAP	Agricultural Smallholder Adaptation Programme
ASAS	Sector Support to the Water Sector (Apoio Sectorial ao Sector de Agua e Saneamento)
AWM	across water management themes
BAGC	Beira Agricultural Growth Corridor
BEMO	Activity Appraisal Document (Beoordelingsmemorandum)
BOF	Policy Support Fund (Beieidsondersteuningsfonds)
BMC	Basin Management Committee
BMP	Beira Master Plan
Cap-Net	International Network for Capacity Development in Sustainable Water Management
CCPT	cross-cutting policy themes
CIWA	Co-operation in International Waters in Africa
D2B	Develop to Build
DC	Delta Co-operation
DFID	United Kingdom Department for International Development
DGIS	Directorate-General for International Co-operation (Directoraat-generaal Internationale Samenwerking)
DNA	National Directorate of Water (Direcção Nacional de Aguas)
DNAAS	National Directorate of Water Supply and Sanitation (Direcção Nacional de Abastecimento de Água e Saneamento)
DNGRH	National Directorate of Water Resource Management (Direcção Nacional de Gestão de Recursos Hídricos)
DRIVE	Development Related Infrastructure Investment Vehicle
DRR	Dutch Risk Reduction Team
DUPC	DGIS-UNESCO-IHE Programmatic Co-operation
EKN	Embassy of the Kingdom of the Netherlands
EMATUM	Empresa Moçambicana de Atum
EQ	evaluation question
FAO	Food and Agriculture Organisation of the United Nations
FDW	Sustainable Water Fund (Fonds Duurzam Water)
FMO	Netherlands Development Finance Company (Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V.)
GBS	general budget support
GDI	Gender Development Index
GDP	gross domestic product
GEEW	gender equality and the empowerment of women
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GOM	Government of Mozambique
GON	Government of the Netherlands
GWA	Gender and Water Alliance

GWP	Global Water Partnership
GWPSA	Global Water Partnership Southern Africa
ha	hectare
HDI	Human Development Index
HGIS	Integrated International Co-operation Group (Homogene Groep Internationale Samenwerking)
IAAP	Implementation Activity and Action Plan
IDE	International Development Enterprises
IFAD	International Fund for Agricultural Development
IFI	international financial institution
IIMA	Tripartite Interim Agreement for Co-operation on the Protection and Sustainable Utilisation of the Incomati and Maputo Watercourses
INIR	National Institute for Irrigation
IOB	Policy and Operations Evaluation Department (directie Internationaal Onderzoek en Beleidsevaluatie)
IPIA	Instituto de Promoção de Investigação em Aguas
IUCN	International Union for Conservation of Nature
IWA	International Water Ambition
IWMI	International Water Management Institute
IWRM	integrated water resource management
JICA	Japan International Co-operation Agency
KfW	Kreditanstalt für Wiederaufbau
km	kilometre
l	litre
LDCF	Least Developed Countries Fund
LIMCOM	Limpopo Watercourse Commission
M&E	monitoring and evaluation
MANFQ	Ministry of Agriculture, Nature and Food Quality (Ministerie van Landbouw, Natuur en Voedselkwaliteit)
MASP	Multi-Annual Strategic Plan
MCWP	Mozambican Country Water Partnership
MDG	Millennium Development Goal
MEA	Ministry of Economic Affairs
MER	Netherlands Commission for Environmental Assessment (Commissie voor de Milieueffectrapportage)
MFA	Ministry of Foreign Affairs
MHSPE	Ministry of Housing, Spatial Planning and the Environment (Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieu)
MICOA	Ministry for the Co-ordination of Environmental Affairs
MI&E	Ministry of Infrastructure and Environment
MOU	memorandum of understanding
MTPWWM	Ministry of Transport, Public Works and Water Management (Ministerie van Verkeer en Waterstaat)
MTR	mid-term review
NAPA	National Adaptation Programme of Action

nd	not dated
NICHE	Netherlands Initiative for Capacity Development in Higher Education
np	no page number
NWO	Netherlands Organisation for Scientific Research (Nederlandse Organisatie voor Wetenschappelijk Onderzoek)
NWP	Netherlands Water Partnership
O&M	operation and maintenance
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
ORIO	Facility for Infrastructure Development (Ontwikkelingsrelevante Infrastructuurontwikkeling)
PLAMA	Plataforma Moçambicana de Agua (Mozambican Water Platform)
PPP	public-private partnership
PRIMA	Progressive Realisation of the Incomati-Maputo Agreement
PROIRRI	Sustainable Irrigation Development Project
PROSUL	Pro-Poor Value Chain Development Project
PSI	Population Services International
PvW	Partners for Water (Partners voor Water)
RBO	river basin organisation
REMCO	River and Environment Management Commission
RVO	Netherlands Enterprise Agency (Rijksdienst voor Ondernemend Nederland)
SADC	Southern African Development Community
SDG	Sustainable Development Goal
(S)NWM	(sub) national water management
SRI	System of Rice Intensification
SWFF	Securing Water for Food
t	tonne
TA	technical assistance
ToC	theory of change
ToR	terms of reference
TPTC	Tripartite Permanent Technical Committee
TWM	transboundary water management
UNDP	United Nations Development Programme
UNESCO-IHE	United Nations Educational, Scientific and Cultural Organisation Institute for Water Education
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
USD	United States dollar
WACDEP	Water, Climate and Development Programme
WANI	Water and Nature Initiative
WB	World Bank
WIN	Water Integrity Network
WM	water management
WMag	water management in agriculture
WMO	water management organisation

WPP	Water Partnership Programme
WUA	Water User Association
WUG	Water User Group
YEP	Young Experts Programme
ZAMCOM	Zambezi Watercourse Commission
ZRA	Zambezi River Authority
ZVDA	Zambezi Valley Development Agency

Summary

Background

The Policy and Operations Evaluation Department (IOB) of the Netherlands Ministry of Foreign Affairs (MFA) is undertaking an evaluation of Dutch aid policy for improved water management, 2006-2016. As part of this evaluation, country case studies have been commissioned, focusing on the four countries that received the largest amounts of bilateral funding for water management activities. These studies are intended to evaluate the results of the water management policy cycle in each country, focusing on effectiveness and efficiency criteria. Each of these studies will be a stand-alone review that can be read and used separately, but will also form an input to the overall policy evaluation.

After centuries of colonial rule and a turbulent post-independence period, Mozambique remained one of the poorest countries in the world during the review period. Although major coal exploitation and promising offshore gas reserves offered the prospect of strong growth, the institutional and economic development of the country were constrained by governance challenges that intensified toward the end of the period. Systematic and sustainable development of water management institutions and procedures in these conditions was difficult, given the weakness of government structures and the poverty of water users. But it was vital: to relieve Mozambicans of the devastation that floods regularly cause; to make urban water supplies reliable, notably in the capital Maputo; and to enhance water productivity in agricultural production. More than most nations, Mozambique was compelled by its geography to depend on constructive transboundary water management (TWM) with upstream countries, to control flooding and ensure appropriate environmental flows in its watercourses.

In addressing these needs, conventional development assistance had to contend with (sometimes unacceptably) poor administrative practice in counterpart institutions. The opportunities for broader engagement of the Netherlands water sector, as envisaged by emerging Dutch policy over the period, were real but limited. Dutch commercial appetite for investment and contracts in Mozambique was understandably low.

As a theory-based evaluation, this country study identified the theory of change (ToC) implicit in Dutch water management policy and programme design in Mozambique, and the assumptions seen to underlie that theory. The report's main findings, summarised below, revisit some of those assumptions and comment on their accuracy.

Main findings

Dutch development aid contribution

1) *The MFA allocated a total of EUR 49.5 million through the EKN's delegated budget for water resource management activities in Mozambique during the review period.*

The categorisation of water management activities used in the overall evaluation distinguishes (sub) national water management planning and implementation activities. Planning received 38% of the MFA budget delegated to the EKN in Mozambique over the review period. Implementation is subdivided into (river) basin management (13% of the total delegated budget commitment); coastal development (3%); and disaster management and ecosystem management (no activities in the EKN Mozambique portfolio). A second principal category concerns water management in agriculture, subdivided into activities focusing on 'crop per drop' enhancements to water productivity (3% of the total delegated budget over the period) and activities with a broader focus on water management in agricultural and rural development (none in this category in Mozambique). A third category is transboundary water management, to which 16% of the total delegated budget was allocated over the review period. In the final category, 27% of the total budget was allocated to activities spanning water management themes. The major activity in this last category was WaterNet, a regional water resource management training programme that was managed for administrative reasons by the EKN in Maputo. Because it had no specific Mozambique focus, this country study does not discuss it in any detail.

With the exception of TWM work and WaterNet, little of the budget summarised above was allocated before 2012, half way through the review period. Most of the Netherlands' support to the Mozambique water sector over earlier decades focused on the country's urgent drinking water and sanitation problems. Water resource management was only added to the portfolio relatively recently, building on a heritage of sector budget support to the National Directorate of Water (DNA). By far the largest commitment was to phase five of that support, which shifted to a more programmatic approach that included water resource management but was scaled back substantially due to administrative, accounting and governance difficulties. By the end of the review period, only just over a third of that project's budget for 2012-2017 had been disbursed. Two other large projects in the water management portfolio only started in 2016.

Overall, therefore, actual disbursements in Mozambique were relatively modest (EUR 21.7 million out of a budgeted EUR 36.3 million, excluding activities across water management themes), and the number of active projects under review is smaller than in the other country case studies, mostly spanning a shorter period. This limits the extent to which effectiveness can be assessed.

2) Most of the Dutch support to water management in Mozambique focused on institutional development.
This is the 'softest' portfolio among the four country case studies undertaken for this evaluation. Much of the MFA funding delegated through the EKN was committed to building the capacity of the DNA, with more allocated to the institutional development of two of the five Regional Water Administrations (ARAs). Only towards the end of the review period, recognising the difficulty of achieving meaningful, measurable and sustainable institutional results, did the EKN begin to reorient the delegated programme to include more practical implementation of water management measures, in both rural and urban settings.

3) In addition to the activities supported with delegated MFA funding through the EKN, MFA central funding supported activities that had links to Mozambique.
As reporting on these centrally funded activities is not broken down by country of expenditure, it is not possible to say what MFA expenditures through this channel were in Mozambique. These activities included capacity development, research, the promotion of good governance in water management, TWM, networking and support for enhanced disaster management. Not managed by the MFA, the Partners for Water (PvW) programme was used actively in Mozambique, with a total EUR 3.6 million committed to work there during the review period. This supported a wide range of activities, focusing in the latter years of the review period on water management in Beira. The Sustainable Water Fund did not support any work on water resource management in Mozambique.

Policy effectiveness

4) Overall, effectiveness was limited.
With limited time and limited scope for effectiveness over five turbulent years in Mozambique's difficult development, the water management portfolio under review here achieved only modest results. Important lessons were learned, however, and useful foundations were laid for potentially greater effectiveness in some aspects of Mozambican water management. Achieving that greater success will, as ever, be contingent on local political, governance and institutional conditions.

5) At national government level, the effectiveness of Dutch institutional development support was modest.
Assessing the effectiveness of institutional development is never easy. It is particularly difficult when, as in Mozambique, clear performance indicators for institutional development were not adequately specified or reported. This country case study found that, at the national level, the effectiveness of institutional development efforts for national water management planning was limited. At central government level, two theory of change (ToC) assumptions proved incorrect in the period under review: that it is socially and institutionally feasible to achieve significant improvements in the quality (including the transparency) of Mozambican water management institutions; and that the Netherlands' own expectations about due process and sound governance would be met. The National Directorate of Water Resource Management (DNGRH) – the apex institution for water management in Mozambique after the DNA was restructured in 2015 – remained weak at the end of the review period.

6) Progress with support to transboundary water management was correspondingly difficult, although some useful results were achieved.

In Dutch efforts to support TWM, particularly of the Incomati and Maputo basins adjoining the capital, these weaknesses at central government level were compounded by difficulties in achieving forward movement with neighbouring governments. Most of this effort remained at the stage of institutional development, promoting a shared understanding between the relevant authorities in the three countries and coaxing them towards agreement on a stronger institutional framework for the governance of the intended planning and implementation. Progress was frustratingly slow. Effectiveness was only partial. The ToC assumption that regional co-operation was politically and institutionally feasible proved weak in this case. Nevertheless, useful results were achieved as understanding, trust and consensus were gradually built and the three governments edged towards setting up the required management body for the two basins. Planning of further work was complicated by disagreements about conceptual and administrative aspects.

7) Experience with support to national institutions led to an unsatisfactory but necessary conclusion.

In Mozambique's water resource management sector (and probably many others), donors' institutional development support for the centre is unlikely to succeed, or even to achieve more than partially adequate results. More satisfactory performance can be achieved closer to the field, in regional and local water management structures and with water users themselves – even if sustainability and replicability at those levels cannot be fully assured. But some support to the centre remains necessary: partly to assure an adequately enabling environment for the more local work, and partly to sustain sufficient institutional and policy collaboration between the Netherlands and the host government. It is not satisfactory to work on a task that cannot fully succeed. But it is necessary for any attempt at better success elsewhere.

8) At regional level, Dutch institutional development support made better progress.

The ARAs are independent from central government in administrative terms – and thus able to pay and retain staff better – although still subject to tight political control from Maputo and constrained by slow performance at central level. Dutch support to ARA-Sul, ARA-Zambeze and ARA-Centro (the latter not with MFA funding) did contribute to the development of competent, adequately resourced, legally authorised and effective institutions for water management planning and implementation by these agencies. Little progress was made in developing the more participatory and arguably most important level of water management, the Basin Management Committees.

9) There was limited progress with regard to cross-cutting policy concerns and commitments.

Gender was not effectively mainstreamed in Netherlands-supported water management initiatives in Mozambique. Environmental sustainability is central to the principles of IWRM that the Netherlands promoted throughout the review period in its support to improved water management in Mozambique. In many cases this was an implicit element of Dutch support, with the explicit focus being on institutional development. Support for lower income groups was a central, but implicit, commitment in Dutch assistance to improved water management. But because the bulk of that assistance was directed to institutional development, it did not directly benefit lower income groups. The period in which the

Netherlands was active in the water resource management sector would, in any circumstances, be a short time in which to achieve a significant enhancement of the Dutch private sector's reputation, market profile and profitability. The opportunities to do this were further reduced by the factors reducing Dutch commercial appetite, and by the focus of the Netherlands portfolio on institutional development, where it was the Dutch water authorities rather than the private sector that made some contribution.

10) Scope for the Netherlands' International Water Ambition was limited, but good progress was eventually made in Beira.

In the difficult economic and governance conditions of Mozambique, the scope for the Netherlands' new IWA (formally launched in April 2016) to enhance the effectiveness of existing policy was restricted. It was not obvious how much the broader engagement of the Dutch water sector, as envisaged by the IWA, could add – although the increasing small-scale involvement of Dutch water authorities was generally (but not entirely) beneficial, and Dutch advisory teams assisting in flood management made useful contributions. Although predating the IWA itself, preparation of the Beira Master Plan was the main opportunity for the most prominent IWA modality to be deployed – a focused application of Dutch expertise aimed at relieving the major water management challenges affecting a significant coastal city.[1] Reaching agreement on how to undertake that exercise took time. But, when that agreement was reached, the work was done well, and has created a foundation for the Netherlands to make a major practical contribution.

11) Despite the constraints and difficulties, the Netherlands remains Mozambique's trusted adviser of choice in water resource management.

At some stages in the review period, relations between the EKN and the DNA/DNGRH were difficult. Trust and mutual understanding were weakened. Levels of frustration ran high. These difficulties mainly affected relations in Maputo. In collaboration elsewhere, the interaction was generally smoother. Despite these difficulties, however, the Mozambique authorities still expressed strong overall trust in the technical quality and strategic good faith of the Netherlands at the end of the review period. This arose partly from the decades of Dutch commitment to the country, and partly from the quality of the work done more recently. The 'soft power' that the Netherlands still wielded was an important asset, and remained a strong foundation for further valuable Dutch contributions to sustainable development in Mozambique.

Policy efficiency

12) The efficiency of all water management in Mozambique continued to be constrained by poor hydrological and related data. The Netherlands made only a modest contribution to addressing this.

The lack of adequate, accurate, regular hydrological data precludes effective water management in Mozambique. Mainly through support to two of the ARAs, the Netherlands made a small contribution to enhancing the collection and management of hydrological

[1] There are no 'urban deltas' in Mozambique.

and related information. A major gap remains to be filled. Efficient and effective water management depends on sufficient, accurate data. Without such data, the value of other investments is significantly constrained.

13) *The analysis of efficiency is more than usually difficult for a portfolio that emphasised institutional development.*

As in Dutch-supported water management programming elsewhere, the monitoring data collected and reported were wholly inadequate for the empirical analysis of efficiency. In organisational and management terms, it is possible to offer some qualitative findings. But the analysis of efficiency is bound to be difficult when it is applied to institutional development efforts, which dominated the Mozambique portfolio. Even if clear performance indicators are set, monitored and reported, it is extremely difficult to identify exactly what the costs per unit of performance were, at either output or outcome level. Judging whether value for money was achieved must be largely subjective. From a practical, external perspective, the answer is negative. From a broader, strategic perspective, it is arguably positive.

14) *The proliferation of instruments, funds and mechanisms was less of a constraint on efficiency in Mozambique than in some other countries.*

The EKN's water management portfolio in Mozambique was relatively small and simple to co-ordinate. Set against this was the increase in the number of facilities and instruments, within and beyond the MFA, that the Netherlands began to deploy in support to water management. As in other countries, the EKN also sought, with only partial success, to track and co-ordinate with the various initiatives supported by central funding from MFA in The Hague. This growing complexity was not conducive to efficient management of the Netherlands' profile and portfolio as a whole. In the case of Mozambique, however, the co-ordination problems do not appear to have been serious. The 'delta team' for Mozambique was able to achieve a smooth joint management system. As elsewhere, the biggest challenge to efficiency, from the EKN perspective, was keeping track of activities funded centrally by the MFA.

15) *Efficiency was constrained by administrative and governance conditions in the Government of Mozambique (GOM). Common dilemmas arose about how to tackle perceived malpractice.*

The efficient management of the portfolio was constrained by the complexities of interacting with the DNA/DNGRH. In this, the Netherlands shared a challenge with other donors in Mozambique and elsewhere: how to manage the discrepancy between its own standards of administrative governance and those it encountered in the GOM. Careful and perhaps unfamiliar modes of diplomacy are needed in order, ideally, to maintain constructive relations while also insisting on proper administrative practice. In the Mozambique experience under review, implementation suffered because the two sides' perceptions of acceptable, efficient administrative performance did not match. While some believe that the EKN was not subtle and smart enough in its management of this issue, others feel that insistence on rigorous due process is essential. In any event, implementation of the water management portfolio was inevitably sub optimal because of the political and governance environment in which it was being attempted.

Recommendations

The primary purpose of this country study is to support IOB's overall evaluation of Dutch aid policy for improved water management – not to make comprehensive or authoritative recommendations about the development of support to water management in Mozambique. However, drawing on the contextual analysis, findings and conclusions set out above, some suggestions can be made about how to shape that support in the years ahead. They are not all totally new. In some cases, they are partly endorsements of existing trends in the MFA's thinking.

Policy effectiveness

1) Deliver most of the support in the regions and the field, but maintain engagement with the centre.
This recommendation represents a necessary compromise. This study has shown the low returns on past heavy investment in institutional development for water resource management at national government level. It has endorsed the MFA's increasing emphasis on institutional development at the regional level of the ARAs, and on achieving tangible, practical results through engagement at field level, for example in the new Water Productivity project and in implementation of the Beira Master Plan. But it has also argued that it would be wrong to abandon all support to the DNGRH. A further, tightly structured, carefully monitored and rigorously managed phase of ASAS support there is appropriate, while recognising that the major drive for sustainable institutional development, allied to meaningful governance reform, must come from the GOM itself. The mechanism of a fund manager, already used by DFID and under consideration by the EKN, is a promising way of maintaining GOM authority over expenditure decisions while controlling disbursements through external channels.

2) Ensure an effective balance between administrative rigour and constructive collaboration.
This recommendation is made because, at some stages of the relationship between the EKN and the DNA/DNGRH during the review period, the quality of the interaction deteriorated significantly. While it could be argued that such a deterioration was inevitable and necessary, given the problems being encountered in the GOM, it is also worth considering that there is more than one way to approach such problems. Those responsible on the Dutch side should take great care to present their concerns and requirements in a way that makes space for the GOM to respond in a constructive and feasible manner.

3) Maintain support for transboundary water management
Some of the MFA's difficulties at central level with the DNA/DNGRH have related to the painfully slow progress of PRIMA. Nevertheless, if acceptable institutional and administrative arrangements can be agreed, it is important to continue (and, if resources permit, to expand) Dutch support for TWM. This is because so many among Mozambique's poor rural population – and indeed the urban water consumers of Maputo – can benefit from more effective TWM. The guiding principle for such Dutch support must be to expedite

practical action and minimise the wastage of time and money on excessively formal bureaucratic structures and procedures.

4) Balance support for institutional development and for practical implementation.

The bulk of the MFA's contribution should be assigned, in roughly equal proportions, to institutional development at the level of TWM, ARAs and BMCs, and to the practical implementation of improved water management measures. The scale of that practical implementation will be modest. But it should be designed, implemented and reported in a way that demonstrates the contributions it makes to the livelihoods of the target populations, and that enables lessons to be learned for the GOM and other agencies to apply at a larger scale. Extension of support to additional ARAs – inevitably, a long-term challenge – is appropriate as long as it does not dilute Dutch assistance in ways that reduce its effectiveness at this level. An important component of that support should be for enhancement of water user fee collection.

5) Implement the International Water Ambition in a realistic and balanced way.

The IWA makes it clear that it does not replace existing Dutch policy. Nevertheless, as a recent integration of activities and statement of vision across three ministries, it currently has some prominence, with its focus of the comprehensive delta approach on 'urban deltas', as a recent complement to existing policy. In Mozambique, the MFA and its partner ministries should recognise the limited scope for the application of the IWA, however vital some of its IWRM principles are for the sustainable development of coastal cities like Maputo and Beira. The opportunities for broader engagement by the Dutch water sector are limited in the short to mid term. The focus of Dutch support needs to remain on the more conventional aspects of institutional development and field implementation, balanced by implementation of the Beira Master Plan as the principal expression of the IWA. Additionally, enhanced TWM of the Incomati and Maputo basins could be the basis for IWA activities to make Maputo's water supply more adequate and reliable, potentially involving additional support to ARA-Sul.

6) Support upgrades to hydrological and related monitoring.

Through support to ARAs and DNGRH, the Netherlands should target some of its practical implementation support to ensure that accurate hydrological data are collected, reported and used in water management planning and implementation. In addition to hydrological data, it should help ARAs to strengthen their data collection on water use and water users (see recommendation 4).

7) Build and capitalise on the Netherlands' profile as 'trusted adviser'.

Despite the difficulties that arose at some stages in the Netherlands' relationship with the Mozambican authorities, the Dutch profile as an expert and trusted adviser on water management is largely intact at the end of the review period. The design and delivery of Dutch support should aim to maintain this status: not only by ensuring the highest quality of technical expertise, but also by qualifying commercial ambition with a primary, impartial commitment to the sustainable management of Mozambique's water resources. Such a stance can help to maintain Dutch engagement, even as development assistance is

complemented by more commercial relationships in which the Netherlands will inevitably be at a price disadvantage. TWM also offers important opportunities for performance of the 'trusted adviser' role. So does a proactive stance by the Netherlands in donor co-ordination in the water resource management sector.

Policy efficiency

8) Enhance co-ordination and quality control across the contributions of Dutch water authorities.
This study finds that Dutch water authorities made useful, if modest, technical and institutional contributions to improved water management in Mozambique during the review period. It also heard reports that this support was sometimes fragmented and not always of optimal technical relevance to local conditions. This is not surprising given the relatively small scale of the contributions (with no full time technical assistance) and the inexperience of some water authority staff in Mozambican conditions. The proposed IMPULSE initiative of the water authorities should work to ensure that advisers visiting from the Dutch water authorities are optimally orientated and that their inputs are designed to maximise relevance and quality in the local context.

9) Strengthen the central role of the EKN in the co-ordination, monitoring and reporting of activities.

The expanded role of other Dutch ministries in support to water resource management in Mozambique can be constructive. A more 'entrepreneurial' mode of management, in which a few well-informed managers combine and deploy the larger number of instruments, funds and facilities now available, can work. The 'regie' team for Beira, and the overall 'delta' team for Mozambique, have proved this. At the same time, the overall composition, structure and modalities for Dutch development co-operation now confuse many stakeholders. From the majority perspective, co-ordination and reporting are incomplete. With the MFA still by far the largest source of Dutch funding for support to water management, and with the EKN indisputably the representative of the Netherlands in Mozambique, it is necessary to strengthen the Embassy's role and resources so that it can monitor and report comprehensively on all the work the Netherlands does in this sector. This should include all activities funded centrally by the MFA, as well as all activities funded through the RVO and other channels. In future, it should not be necessary for an evaluation like this one to have to pull together summary data from multiple sources. More importantly, it should be possible for the Dutch government and taxpayers to gain an easy overview of all the ways their resources are being used in this sector of development co-operation with Mozambique. A stronger co-ordination, monitoring and reporting role for the EKN should include resources (budget and staff) for more frequent field visits to activities that the Netherlands supports.

1

Introduction

1.1 Policy evaluation of Dutch aid policy for improved water management, 2006-2016

The Policy and Operations Evaluation Department (IOB) of the Netherlands Ministry of Foreign Affairs (MFA) is undertaking an evaluation of Dutch aid policy for improved water management, 2006-2016.[2] This will complement an earlier policy review of the Dutch contribution to drinking water and sanitation programmes in developing countries (IOB, 2012). The evaluation team has undertaken extensive research on the global portfolio of Netherlands support for water management over the 11-year review period. Its overall terms of reference (TOR) identify three broad policy objectives, which

'are the core of the Dutch water management for development policy between 2006 and 2015. They are therefore the main focus of attention in this study:

- *water productivity: improved water management for increased productivity in agriculture;*
- *developing and implementing water management plans at national or sub-national level;*
- *improving transboundary water management [TWM] in watershed areas.'* (IOB, 2016, p. 7).

The ToR for the policy evaluation were structured in terms of these three objectives.

Improved provision of water for agriculture was a long-standing component of Dutch development co-operation. The concept of **water productivity**, focused on more efficient use of water in agriculture, gained more prominence in Dutch water management policy in the latter part of the review period, notably after the 2012 policy letter to Parliament, which made 'efficient water management, particularly in agriculture' one of its three themes (MFA, 2012a, p. 7). In the course of the evaluation, this component of the global Dutch contribution to improved water management has been categorised as **water management in agriculture** (WMag) and divided into two sub-categories: **agricultural development** (i.e. WMag with a broader focus than only water productivity) and **water productivity** (i.e. WMag with a specific focus on water productivity in agriculture).

While policy statements referred repeatedly to **water management plans**, this represented a broad commitment to effective water management – expressed in the 2012 policy letter, for example, as 'improved watershed management and safe deltas' (MFA, 2012a, p. 8). It meant enhancing water security[3] and its component objective of water safety). It meant working with partner countries to implement the principles of integrated water resource management (IWRM), with their multiple social, gender, governance, economic and environmental dimensions. Improved water management and better water security were intended as a foundation for more resilient and sustainable livelihoods, often but not

[2] The study was originally designed to cover ten years, 2006-2015. Later, it was decided to include 2016.

[3] Defined as 'the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability' (UN Water, 2013: 1).

always based on enhanced agricultural production. In the course of the evaluation, this area of work has been categorised as **(sub) national water management** ((S)NWM), subdivided into (S)NWM planning and (S)NWM implementation, with the latter further divided into four sub-categories: (river) basin management; coastal development; disaster management; and ecosystem management.

These first two themes overlap in various ways. Optimum water productivity cannot be achieved unless effective water management is planned and practised across the hydrological systems within which agriculture takes place. Water management efforts in Mozambique have had enhanced crop production and agrarian livelihoods as one of their objectives. The evaluation distinguishes the two themes in order to reflect the separate, additional emphasis that Dutch policy began to place on water productivity during the review period.

Throughout the review period, Netherlands policy also recognised the **transboundary** nature of many water management challenges. International boundaries often divide catchments. This was therefore a third policy objective, and is now a third thematic area for this evaluation.

Many of the activities reviewed in this global study do not fit neatly into one of the categories outlined above, and some were explicitly focused on one or more of the cross-cutting policy themes to which Dutch development co-operation policy was committed during the review period, such as gender or climate change adaptation. The policy review categorised these as **cross-cutting policy themes** (CCPT). None of the activities in Mozambique were classified as CCPT – although some activities may have included CCPT objectives. Other activities were undertaken **across water management themes** (AWM), in fields such as capacity development, awareness raising, research and policy dialogue. For centrally funded activities, the review subdivided the AWM category into Global Water Partnership (GWP) activities; activities of knowledge institutions; contributions to multi-donor trust funds; and activities to promote the engagement of the Dutch water sector.

Dutch water management support to developing countries was mainly channelled through the delegated budgets allocated by the MFA to embassies for their management. However, significant amounts were increasingly devoted to programmes that were administered centrally, by the departments responsible for environmental and water issues (ministerial structure and departmental titles and responsibilities varied over the review period). The overall ToR summarise the principal policy trends over the 11-year review period, and how these were reflected in the nature of the work supported. Two related features of policy development have been an increasing emphasis on private sector engagement (as the concept of 'aid and trade' gained prominence in Netherlands approaches to countries like Mozambique (section 3.1.1 below)), alongside ongoing inputs by non-governmental organisations (NGOs) and knowledge institutions; and an increase in the number of delivery channels, instruments, mechanisms and agencies. It is therefore necessary for the evaluation to assess not only conventional project work done by the MFA and its embassies,

but also activities implemented through programmes such as the Sustainable Water Fund (FDW, funded from the Official Development Assistance (ODA) budget) and Partners for Water (PvW, funded from a non-ODA budget[4]); and to understand the roles and performance of the Netherlands Enterprise Agency (RVO) and the Ministry of Infrastructure and Environment (MI&E), relative to those of the MFA. It must also consider the relationship between Dutch and other inputs in various activities that were co-financed with international finance institutions like the World Bank (WB) and implemented by multilateral agencies like the United Nations Food and Agriculture Organisation (FAO) and the International Fund for Agricultural Development (IFAD).

The overall ToR for the evaluation explain that Bangladesh, Indonesia and Mozambique were among the largest recipients of delegated funding through the MFA for water management activities over the review period. The ToR propose special studies to evaluate the results of the water management policy cycle in these three countries, focusing on effectiveness and efficiency criteria. Mali was subsequently added as a fourth country case study. Each of these studies will be a stand-alone review that can be read and used separately, but will also form an input to the overall policy evaluation.

1.2 Mozambique case study

The overall ToR state that the purpose of the evaluation 'is to contribute to the accounting for the Water for Development policy as well as to learning, by description and analysis of policy implementation and results and assessment of its effectiveness and efficiency and by deriving possible issues, lessons and recommendations for future policy' (IOB, 2016, p. 4).

As part of the overall evaluation, this Mozambique country case study shares the purpose set out above, with its accountability and learning functions. The latter function is particularly important. As an evaluation of activities up to the end of 2016, the study will, strictly speaking, take a historical perspective. At the same time, its main value will be in establishing findings and proposing conclusions that can be debated and used in the ongoing implementation of the Netherlands-Mozambique water management portfolio. Although an independent and neutral exercise (section 1.3), the study is intended to make a constructive contribution to enhancing Netherlands support to water management in Mozambique.

The scope of this Mozambique country case study reflects the scope of the overall evaluation, covering 2006-2016. As the overall ToR indicate, the focus is on Netherlands official development assistance (ODA) funding to water management activities in the country through country programmes and centrally funded activities of multilateral organisations, knowledge institutions, NGOs and public private partnerships (PPPs) – as well as other activities with a significant water management focus or component funded outside the MFA Foreign Aid and Trade policy, Article 2 (IOB, 2016, p. 16; see also MFA, 2013). Again reflecting

[4] See footnote 6.

the approach of the overall evaluation, the case study concentrates on larger-scale activities, mainly those funded through the delegated budget of the Netherlands Embassy (EKN). However, careful attention is also given to centrally-administered activities and to those delegated projects with smaller budgets, as well as work done in Mozambique through PvW.

1.3 Approach and methods

1.3.1 Terms of reference

The ToR for this country study included an initial description of the water management activities supported by the Netherlands in Mozambique during the review period, together with data on project budgets, duration etc. Effectively, the ToR served as an inception report for the study, presenting material that this country study report discusses in more detail. (Some of the ToR text helps to answer evaluation questions and is reproduced verbatim.) It is therefore not useful to include the full country study ToR in an annex, as is the normal practice for such reports. Instead, Annex 1 presents relevant extracts from the ToR.

1.3.2 Evaluation questions and matrix

The overall evaluation to which this country case study contributes seeks to answer 24 evaluation questions (EQs) posed by its ToR. Those EQs combine factual enquiry with the standard evaluation criteria of effectiveness and efficiency. Impact is not addressed. The last two EQs ask about policy options. A summary of the overall evaluation's EQs follows:

- Five EQs about the **policy cycle** ask about the rationale, context, institutional setting, policy mechanisms, expenditures, monitoring and evaluation of activities in support of water resource management over the review period.
- A series of EQs about **effectiveness** follows.
  - Three EQs on **water productivity** ask whether MFA-supported initiatives enhanced the efficiency of agricultural water use, as well as the enabling environment and farmer capacity; and whether farmers thus supported pay for the services of water user associations (WUAs).
  - Four EQs ask about MFA support for approved **water management plans**; whether such support promoted IWRM principles and enhanced the technical and institutional environment; and whether these plans were resourced and implemented.
  - Three EQs ask whether MFA support enhanced **transboundary water management** through the necessary formal arrangements, strengthening the technical and institutional environment; and whether riparian states budgeted, implemented and sustained TWM agreements and systems.
  - Three EQs about **crosscutting issues** ask whether water resource management support incorporated the priority crosscutting themes in Dutch development co-operation policy; whether water resource management was enhanced while improving water management benefits for lower income groups and women beneficiaries; and whether

programmes jointly achieved water management benefits and market benefits for the Dutch private sector.
- Four EQs about **efficiency** span issues of organisational efficiency; operational and technical quality; leveraging of commitment and resources from other donors and agencies; and empirical analysis of costs and benefits.
- Finally, in consultation with other Government of the Netherlands (GON) agencies, IOB was asked to pose two EQs about **policy options**: ways to increase efficiency and effectiveness and reduce overall budgets in this field.

In preparing the Mozambique study, the evaluation team reviewed this overall set of questions and elaborated them to generate 34 EQs that it included in the ToR for the study. It developed an evaluation matrix (shown below at Annex 2), setting out these EQs and explaining how the evaluation team proposed to answer them. The Mozambique EQs are structured and grouped in the same way as those for the overall evaluation, but go into more detail on some points. They include questions about the accuracy of assumptions made in the inferred theory of change (ToC) for the overall programme of support to improved water management (see below).

- The EQs about the **policy cycle** include the extent to which evolving Dutch water management policy was reflected in engagements with Mozambique, and whether an appropriate balance was achieved between water security and safety initiatives.
- **Effectiveness**
  - Five EQs about **water productivity** go into more detail about the enabling environment and management regime that Dutch support may have helped to develop, about the capacity, skills and land access of individual farmers and about the accuracy of ToC assumptions.
  - A further seven EQs span a slightly revised theme of **water management planning and implementation**. In addition to the points covered by the overall evaluation ToR's EQs, they go into more detail about whether plans prepared with Dutch support have been resourced and implemented; whether water safety and water security objectives are being achieved; and whether ToC assumptions were accurate.
  - Five EQs on **transboundary water management** again amplify those posed in the overall study, including the key issue of whether Dutch support for TWM enhanced water safety and water security
  - The EQs **about crosscutting** issues are broadly the same as those posed by the ToR for the overall evaluation.
- **Efficiency EQs** for Mozambique cover the same points as those for the overall evaluation, but go into slightly more detail and end by asking whether the ToC made realistic assumptions about efficiency. In practice, it proved impossible within the scope of this study to obtain empirical data for a quantitative analysis of costs and benefits.
- Questions **about policy** options replicate those for the overall evaluation, with a note committing the country study to identify ideas that might be taken up in the overall discussions.

Once approved, this matrix constituted the backbone for the country case study report. Against the background of the country context summarised in chapter 2 below, the findings in chapter 3 seek to answer the questions, which are quoted at the start of the sections that address them. The matrix shows what indicators the evaluation team expected to use in answering each EQ; the mode of analysis that would be applied in the planned mixed-methods approach (see below); the main sources of information, and how the data would be collected. Given the broad thematic and temporal scope of the study, much of the analysis was expected to be qualitative, based on project reporting and evaluations as well as information gathered from interviews of and focus group discussions with a wide range of stakeholders (Annex 4).

1.3.3 Theory of change

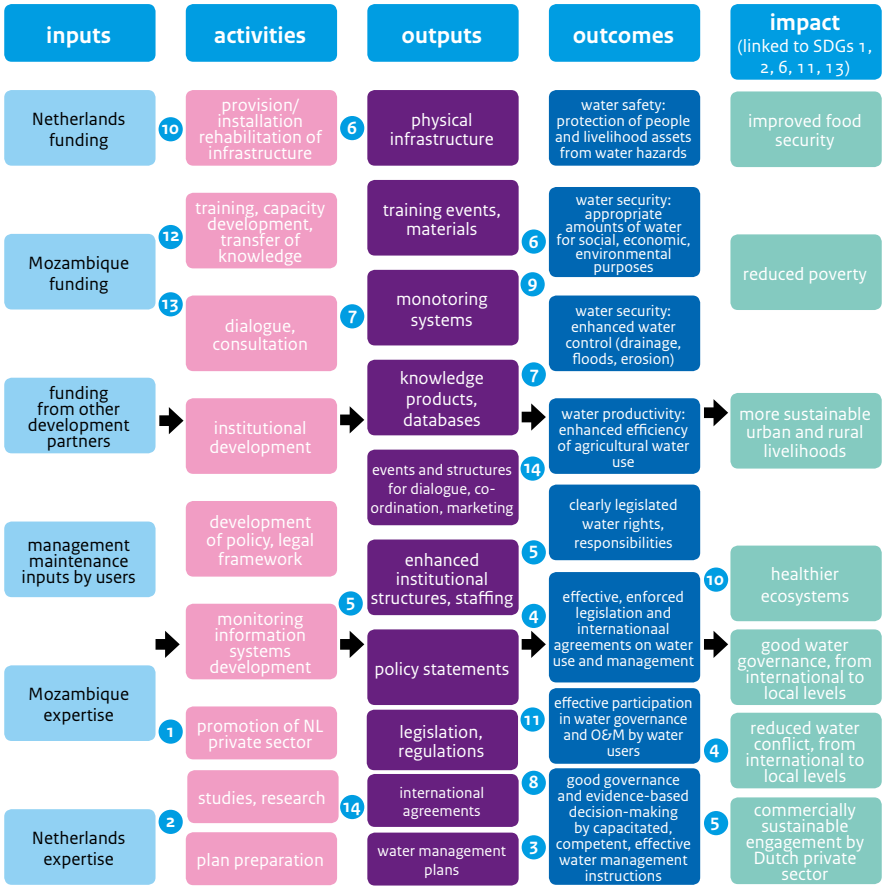
As the relevant section of the ToR (reproduced at Annex 1) explains, the main purpose of referring to a theory of change in this country study is to identify and interrogate the implicit assumptions underlying the aggregate logic chain of Netherlands aid policy for improved water management, as this was applied in Mozambique over the review period. The findings presented in chapter 3 are used as the basis for a commentary on the accuracy of these assumptions within the presentation of main findings in chapter 4. This is an aggregate commentary on the quality of design, which is directly relevant to assessment of the policy that should have driven the design.

The ToC is thus used mainly as a tool to help clarify the study's findings about Dutch policy and interventions. An alternative, broader ToC would look at all factors and processes in the Mozambique water management sector, and arguably enhance understanding of the relevance and value of Netherlands support within that sector and its environmental, economic, social and institutional frameworks. This study sticks to the narrower purpose of ToC analysis, which focuses on a specific intended intervention – or, in this case, the specific package of interventions represented by Dutch aid policy to improved water management in Mozambique over the review period. Spanning many interventions over 11 years, this is an aggregate, generic, schematic representation of design logic. Individual project design did not present ToCs. Composite programme design (the EKN's multi-annual strategic plans (MASPs)) did not do so either. At the generic level, the diagram in Figure 1.1 offers an inferred overview of the process of change that Netherlands policy on support to water management aimed to support. Having been reconstructed in this way, the ToC's main analytical advantage does not lie in detailed exposition of the various inputs, outputs, outcomes etc. It lies in a discussion – again, schematic and generalised – of the main assumptions that underlay the design logic over the period.

The assumptions identified within the ToC are shown below. They are shown on the ToC diagram as small numbered circles. The positioning of these assumptions in the ToC is schematic and simplified; in some cases, the assumption pervades the entire logic chain, and in others it can be placed at several positions between inputs and impact. Some of the assumptions are repeated on the diagram to indicate particular places in the logic chain where they are important, but in order to keep the diagram readable this cannot be done exhaustively.

1) A prominent assumption underlying Netherlands water management programming in Mozambique is that Dutch expertise can add value and fill gaps in locally available knowledge and expertise.
2) A related assumption is that Dutch and Mozambican expertise (along with other external expertise that may be available) are complementary and synergistic. Ideally, the whole should be more than the sum of its parts.
3) The ToC assumes that plans lead to meaningful, effective action. In many contexts worldwide, this assumption is often unrealistic. Planning sometimes becomes a substitute for action; often planning itself is unrealistic, particularly about institutional capacity to implement the plans that are generated.
4) Linked to this is the assumption that it is socially and institutionally feasible to achieve significant improvements in the quality (including the transparency) of Mozambican water management institutions.
5) Another pervasive assumption is that there is political will at the various necessary levels for Netherlands-supported policy and institutional initiatives to be converted into meaningful action.
6) From the technical perspective, the ToC assumes that the paradigms and approaches for water management that the Netherlands promotes and supports in Mozambique are in fact relevant and appropriate.
7) The consequent assumption is that the techniques used in Netherlands-supported water management interventions are feasible, practical and affordable in Mozambican conditions.
8) For TWM, an obvious assumption was that regional co-operation was politically and institutionally feasible.
9) As the policy emphasis on Dutch private sector engagement and aid and trade modalities grew, the assumption for Mozambique was that such engagement was relevant and could be effective for achieving the objectives of water management interventions.
10) The review period saw substantial growth in the number of instruments, facilities and mechanisms deployed in an increasingly interministerial Netherlands water management policy and strategy. As applied in Mozambique, this required the assumption that this suite of methods and tools were relevant, complementary, effective and efficient.
11) The policy emphasis on participatory water management leads to the implicit ToC assumption that water users do indeed contribute significantly to the management and maintenance of water infrastructure.
12) All development efforts in Mozambique must assume that natural disasters during their implementation period will not significantly affect their progress and performance.
13) A basic assumption made in all bilateral and multilateral development co-operation is that the various parties' own assumptions about due process and sound governance in the relationship will remain valid.
14) With the growing emphasis in Dutch programming on the commercially beneficial engagement of the Netherlands private sector, it is important to note the assumption that Dutch firms have the appetite to operate, and potentially invest, in Mozambique.

Figure 1.1 *Mozambique water management policy: implicit theory of change*



Covering a complex, extended set of interventions, this single ToC diagram only offers a summary presentation of design over the 11-year review period. Thus, for example, activities like dialogue, consultation, institutional development and policy development are expected to take place at multiple levels, from local water user groups to international transboundary negotiations between government authorities. Outputs and outcomes, too, may be at local, catchment, national or international scale. The arrows representing causal links from left to right across the logic chain are schematic only.

1.3.4 Approach and methods

A key principle in this policy evaluation overall, and specifically in this country study, is not to attempt an evaluation of each project in the portfolio under review. While the study bases its findings on the experience of the many projects and interventions funded by the Netherlands over the 11-year period, and makes frequent reference to the mid-term reviews (MTRs) and evaluations of those activities, it cannot and should not attempt an analysis of each individual project.

The country study has been guided by five other general principles, discussed in more detail in the extract from the ToR at Annex 1:

- independence: a neutral and unbiased approach;
- adherence to high standards of evaluation ethics;
- viewing all aspects of the subject matter through a gender lens;
- maximum effort, within the time constraints of a short country mission, to seek the views of project participants and beneficiaries;
- triangulation, in order to cross-check findings. Not surprisingly, informants gave divergent opinions on some issues. Setting these (and in some cases relevant empirical information) side by side through the triangulation process helped the evaluation team to determine whether all the various arguments were credible; whether some were better substantiated than others, and what the implications of the divergence were for answering the evaluation questions.

As explained in the ToR (Annex 1), a combination of methods was used for the country study:

- intensive use of data, from MFA and other databases, on the portfolio of activities under review;
- detailed review of the documentation on these activities, during desk work by the evaluation team before the visit to Mozambique;
- interviews and focus group discussions in Mozambique and the Netherlands with a wide range of informants, participant and beneficiaries (listed at Annex 3). Informants were selected in consultation with stakeholders in Mozambique and elsewhere who are knowledgeable about the country and the sector, and included land and water users in the limited number of communities that it was possible to visit during the country study mission. While the coverage of informants could certainly have been extended if more

time and resources had been available, the evaluation team is confident that a sufficient spectrum of opinions, expertise and interventions was included – although it was understandably easier to find informants on current and recent activities than on those under way at the start of the review period. All interviewees were assured of confidentiality. Although much of this report is based on the (duly triangulated) information and views they provided, none of this material is attributed to specific informants.

The overall ToR for this policy evaluation (IOB, 2016) state that a number of in-depth studies form part of the exercise. One of these concerns water management activities in Mozambique: support for TWM in the Incomati and Maputo river basins by Mozambique, Swaziland and South Africa. During this country study, as much attention as possible was given to that TWM experience, in particular the project for Progressive Realisation of the Incomati-Maputo Agreement (PRIMA).

1.4 Country study activities

The main activities of the evaluation team[5] for this country study were:

- collection of data and documentation about the project portfolio across all channels and instruments;
- preparation of the country study TOR;
- evaluation mission to Mozambique (12-26 March 2017), comprising a series of meetings with stakeholders and site visits in Beira and Tete;
- preparation of this country report.

[5] Stephen Turner (consultant, lead evaluator for Mozambique country study); Pim de Beer (evaluator, IOB: responsible for desk research in The Hague); Belis Matabire (consultant).

2

Context

2.1 Mozambique: economy, society and environment

With a population of approximately 29 million growing at an annual rate of 2.9%, the Republic of Mozambique is sparsely populated. It covers 801,590 km^2, making it slightly smaller than Namibia; but it extends some 2,000 km from its southern border with South Africa to its northern border with Tanzania. Its long western borders with South Africa, Swaziland, Zimbabwe, Zambia and Malawi are traversed by many rivers as they flow east to the Indian Ocean – including the Incomati and Maputo in the far south, around the capital city; the Limpopo, not far north of the capital; the Save; the Zambezi; the Pungue, at whose mouth Beira is situated; and the Licungo. Many Mozambicans suffer from flooding in these river basins. Flood disasters in 2000, 2015 and 2017 were particularly serious, with the 2000 event the worst in 50 years. Transboundary water management is clearly a high priority for Mozambique, and the country is in the typically disadvantaged position of downstream states that need the co-operation of upstream neighbours.

Other aspects of environmental diversity reflect Mozambique's size, topography and latitudinal spread. The climate ranges from semi-arid and subtropical in the south to tropical in the north, with annual rainfall ranging from 300 mm in the lowlands of the southern interior to 1,400 mm in the Zambezi delta (one of the few deltas of any significance along the country's lengthy coastline). Forests and woodland comprise about half the country's total land cover, with other wooded formations making up a further 19% and cultivated land some 15%. The Zambezi delta is cited as a wetland ecosystem of international importance. Extensive coastal mangrove zones are in decline (Byers et al., 2013, pp. 13-15, 18). Extraction of commercial timber for export is one of the causes of natural habitat degradation and reduction in catchment cover, although wood consumption for fuel is estimated to be 250 times as much as that used by logging operations (Byers et al., 2013, p. 1). One study estimated the annual cost of environmental degradation as 6% of GDP. It also quoted an economic analysis that estimated that climate change would cause the GDP of Mozambique to fall between 4% and 14% (Wingqvist, 2011, pp. 1, 9). Mozambique has been described as one of the countries most vulnerable to climate change.

'Poverty, weak institutional development and frequent extreme weather events make Mozambique especially vulnerable. Climate-related hazards such as droughts, floods and cyclones are occurring with increasing frequency, which is having a cumulative and devastating impact on a population that is insufficiently prepared. Central Mozambique is projected to experience recurrent agricultural losses as a result of droughts, floods, and uncontrolled bush fires. The densely populated coastal lowlands will be increasingly affected by severe erosion, saltwater intrusion, loss of vital infrastructure and the spread of diseases such as malaria, cholera, and influenza. Changing rainfall patterns will lead to a decrease of soil water recharge, impacting ground water resources and the water table in wells. Reduction of Mozambique's trans-boundary river flows will decrease the availability of surface water.' (MER, 2015, p. 1).

Over the last 50 years, Mozambique has experienced much turbulence and political, social and economic change. Centuries of harsh colonial rule ended abruptly in 1975 when Portugal withdrew from its overseas possessions following a coup in 1974. The socialist

Frelimo liberation movement that had been fighting for independence since the early 1960s then took power and has retained it ever since. But it was engaged in civil war against Renamo, a right-wing rebel movement supported by the apartheid regime in South Africa, from 1976 to 1992. The destruction and disruption of that war compounded the economic damage caused by the rapid departure of the Portuguese from the exploitative settler economy that they had created. The government's relations with Frelimo have remained uneasy, with military activity breaking out periodically.

Governance and administration challenges remain significant in Mozambique. Decentralisation is a sensitive political issue as Renamo and other parties seek to adjust established power structures (Frey, 2016). Along with Honduras, Malawi, Mauritania and Vietnam, the country ranked joint 112th on the Transparency International Corruption Perceptions Index for 2015 (Transparency International, 2016a). In 2005, again with a group of other countries, it was placed joint 97th (Transparency International, 2016b). Mozambique ranked 137th out of 190 countries in the Ease of Doing Business scores for 2017, moving down from 134th in the 2016 survey. It ranked 168th in terms of getting electricity and 184th in terms of enforcing contracts (World Bank, 2017b). Corruption has become a major concern, particularly since the undisclosed borrowing linked to the EMATUM tuna fishing company came to light in 2016.

'…the consequences of this borrowing led to a rapid and dramatic deterioration in the macroeconomic framework. Thus despite favorable longer term growth prospects, the economic picture for the next several years will be considerably more challenging than previously thought and Mozambique will be challenged to restore the confidence of investors and donor partners.' (World Bank, 2017a, p. 1).

These recent difficulties followed a period of strong economic performance, with real growth in gross domestic product (GDP) averaging 8% over the past two decades – driven partly by major coal mining development. In 2014, the United Kingdom Department for International Development (DFID) wrote that 'by 2025, Mozambique aims to complete its transformation from a poor, post-conflict nation to a thriving, regional trade and investment gateway (DFID, 2014, p. 5). However, growth declined from 6.6% in 2015 to 3.3% in 2016, due partly to drought and low commodity prices; and inflation averaged 20% in 2016, with food price inflation at 32% (World Bank, 2017a, p. 3). Like neighbouring Tanzania, Mozambique faces the possibility of major economic growth arising from the exploitation of offshore gas deposits, but by the end of this evaluation's review period the country was facing a severe debt crisis and government finances were severely restricted.

'The previously undisclosed loans have changed Mozambique's fiscal landscape as higher debt service, lower donor support, and a lack of room for borrowing shrink fiscal space. The revelations triggered a suspension of the IMF program6 and donor support to the budget' (World Bank, 2017a, p. 6; see also Patel, 2017).

Mozambique ranked 181 out of 188 nations on the 2015 Human Development Index (HDI), with the same score as South Sudan. Seventy percent of the population were estimated to be living in 'multidimensional poverty' that year, with 69% living below an income poverty line of USD 1.90 per day (purchasing power parity: UNDP, 2016a). The country's Gender

Development Index in 2015 (GDI, calculated as the ratio of female to male HDI values) was 0.879 (compared with Zimbabwe's 0.927 and Swaziland's 0.853). This was above the mean GDI for countries in the 'low human development group' within which Mozambique's HDI fell, and also above the mean GDI for the 'medium human development group' (UNDP, 2016b). There was little difference between the estimated gross national income per capita for males and females (USD 1,184 and 1,016 respectively). Many Mozambican livelihoods still face severe adversity. In April 2016, UNICEF reported that '1.5 million people are facing food insecurity and nutritional crisis in seven provinces… 191,000 children are expected to be severely acutely malnourished in the next 12 months…' (UNICEF, 2016, p. 1).

From the early years of the apartheid South African regime's involvement in the civil war until recently, the government of Mozambique (GOM) was strongly supported by many development partners, including the Netherlands. At least 47 bilateral and multilateral development agencies were reported to be operating in the country in 2016. Reflecting global trends, many donors, including the Netherlands, provided general budget support (GBS), alongside sector budget support, to assist the GOM in the implementation of its poverty reduction strategies, the third of which, the Plano de Acção de Redução de Pobreza (PARP), covered 2011-2014.

However, the corruption and governance challenges outlined above have been a growing concern for the international community, not to mention Mozambican citizens. The 2016 international crisis of confidence in the fiscal integrity of the GOM led many donors to halt some or all of their operations in Mozambique; although these decisions were often linked to the necessity of budget cuts in donors' global aid programmes. The Netherlands ended its GBS in 2013 (partially in line with changing Dutch policy about GBS worldwide). Several other countries, such as Finland, Belgium and Norway have also withdrawn this mode of support. However, dissatisfaction with the GOM's response to its concerns about financial management led the Government of the Netherlands (GON) to take further action.

In a September 2016 letter to Parliament, the Dutch Minister of Foreign Trade and Development Co-operation communicated the GON's decision 'to convert its provisional decision of 30 May – to withhold EUR 10.2 million in aid to the Mozambican central government – into a definitive measure for the whole of 2016. However, the government would like to minimise the impact of this decision on the Mozambican people. Consequently, EUR 5.2 million of those funds will be spent through alternative channels. The remaining EUR 5 million will not be spent in Mozambique. Additional measures must be taken to restore trust and a normal aid relationship. The EUR 5.2 million to be spent through alternative channels will be used for healthcare and to promote food security as follows. PSI will receive EUR 4 million to support 120 family planning clinics serving 192,000 women and girls. The other EUR 1.2 million will be invested by the Zambezi Valley Development Agency (ZVDA) in climate-smart agriculture, seed improvement and strengthening business skills and land rights' (MFA, 2016). Of the EUR 10.2 million withheld, EUR 1 million had been intended for a further phase of sector support to water management.

2.2 Water management challenges in Mozambique

The most evident water management challenge facing Mozambique is the assurance of water safety. As noted above, floods are a frequent threat to livelihoods in many parts of the country: both dramatic disasters like those in the Limpopo valley in 2000, and also more regular events like the flooding of low income residential areas in Beira. As was shown in section 2.1, achieving effective TWM is a major part of this challenge.

'Mozambique is not considered as water scarce. It is, however, highly water vulnerable and insecure because of increasing uncertainty in the national water resources base. This is due to the high dependency on international river basins (over half of the national water resources are shared with neighbouring countries), variable climate with high variations in annual and inter-annual rainfall, frequent flood and drought events, the uneven geographic distribution of water resources across the country and competing future demands by water-dependent economic sectors in many river basins. These contributing factors are aggravated by an underdeveloped and largely degraded stock of water infrastructure that increases water vulnerability and poses a serious risk on the national economy.' (World Bank, 2007, p. 6).

Droughts are a significant water management challenge for Mozambique, as well as floods. Linked again to TWM, Maputo's water supply was severely reduced in 2016-2017 due to low rainfall in the catchment of the Umbeluzi River, which lies mainly in Swaziland.

Hydropower is another dimension of Mozambique's TWM challenge, given that the Zambezi (and potentially other rivers) from which the country generates electricity for domestic use and for export (at the Cabora Bassa dam) must be managed in consultation with other riparian states.

More conventional water management challenges concern irrigation: both the adequate maintenance of the existing, limited irrigated areas and schemes, and the development of the major potential for additional irrigation, at large and small scales.

'Most of the sectors which contribute to the Mozambican economy are either directly dependent upon secure, sustainable water availability or are indirectly affected by water shocks (droughts or floods). The growing water demand from the major sectors of the economy, specifically agriculture, impose a serious constraint on the medium-term and long-term growth prospects in terms of water availability in some river basins, especially in the economically most developed South and the Centre. From 2003 to 2015 the domestic and municipal water demand is predicted to increase by 45% in Southern Mozambique and by 35% in the Central region of the country. With steady growth in the large industrial sector, the water demand for large industries is estimated to increase by 70% in the South and by 60% in the Central Mozambique. The expected growth in hydropower production is likely to require an increase in peak capacity. The Government also intends to double the current irrigated area in the medium term, which would be mainly achieved through rehabilitation of the existing irrigation schemes, using public and private funding.' (World Bank, 2007, p. 12).

While the recent downturn in economic growth may have slowed the increase in national water needs, the overall challenge to Mozambique is plain. Water safety and the broader requirement of water security must be assured in the face of growing environmental

uncertainty and the urgent necessity of improving standards of living. This is partly a technical challenge, but most fundamentally it makes major institutional demands on government and society. Systems, capacity and competence are needed for the efficient management of water resources in order to meet multiple demands in a sustainable manner while protecting the population from extreme natural events.

2.3 Netherlands aid policy for improved water management

EQ 1: What was the rationale for Netherlands assistance to water management in Mozambique?

Dutch policy for improved water management evolved over the review period. It maintained a focus on water management planning and implementation for enhanced water security based on IWRM principles, at sub-national, national and transboundary levels; and, from 2011, an initial focus on efficient water use, particularly in agriculture. The 2012 policy letter of the Ministry of Foreign Affairs to Parliament provides the most elaborate statement of that policy (MFA, 2012a). In that letter, the Ministry set out a two-pronged approach to institutional development and to infrastructural development – both emphasising support for the poorer members of society, with the themes of food security and adaptation to climate change integrated and a commitment to the cross-cutting themes of good governance and gender. It focused on three themes: (1) efficient water use, particularly in agriculture; (2) improved watershed management and safe deltas (reflecting the prominence of the delta concept in comparing Dutch experience and expertise with the water management challenges of some developing countries where deltas were also significant features in the landscape and the economy); and (3) access to safe drinking water and sanitation (outside the scope of this evaluation). It also noted the fact that – as in Mozambique – water management challenges may be international in nature, because catchments and river systems may span two or more countries – often causing tensions that Dutch interventions might seek to mediate (MFA, 2012a, pp. 11-12).

Two principles running throughout the review period in Dutch aid policy for improved water management are the importance of context specificity (see, for example, MFA, 2007, p. 11) and the necessity that interventions be demand driven (MFA, 2012a, pp. 5, 13). Both may be considered so obvious as to need little further emphasis here – but for a policy evaluation it is nevertheless important to assess the extent to which embassies were able to align policy emanating from The Hague with local realities and priorities. How well did Dutch global policy fit local circumstances and needs – in this case, in Mozambique?

Reflecting a broader trend in Dutch public policy, the MFA policy letter emphasised the role of the Dutch water sector (businesses, knowledge institutions and NGOs) in delivering on these aid policy commitments. The main evaluation report explains that this was complementary to the broader GON approach to international engagements in the water

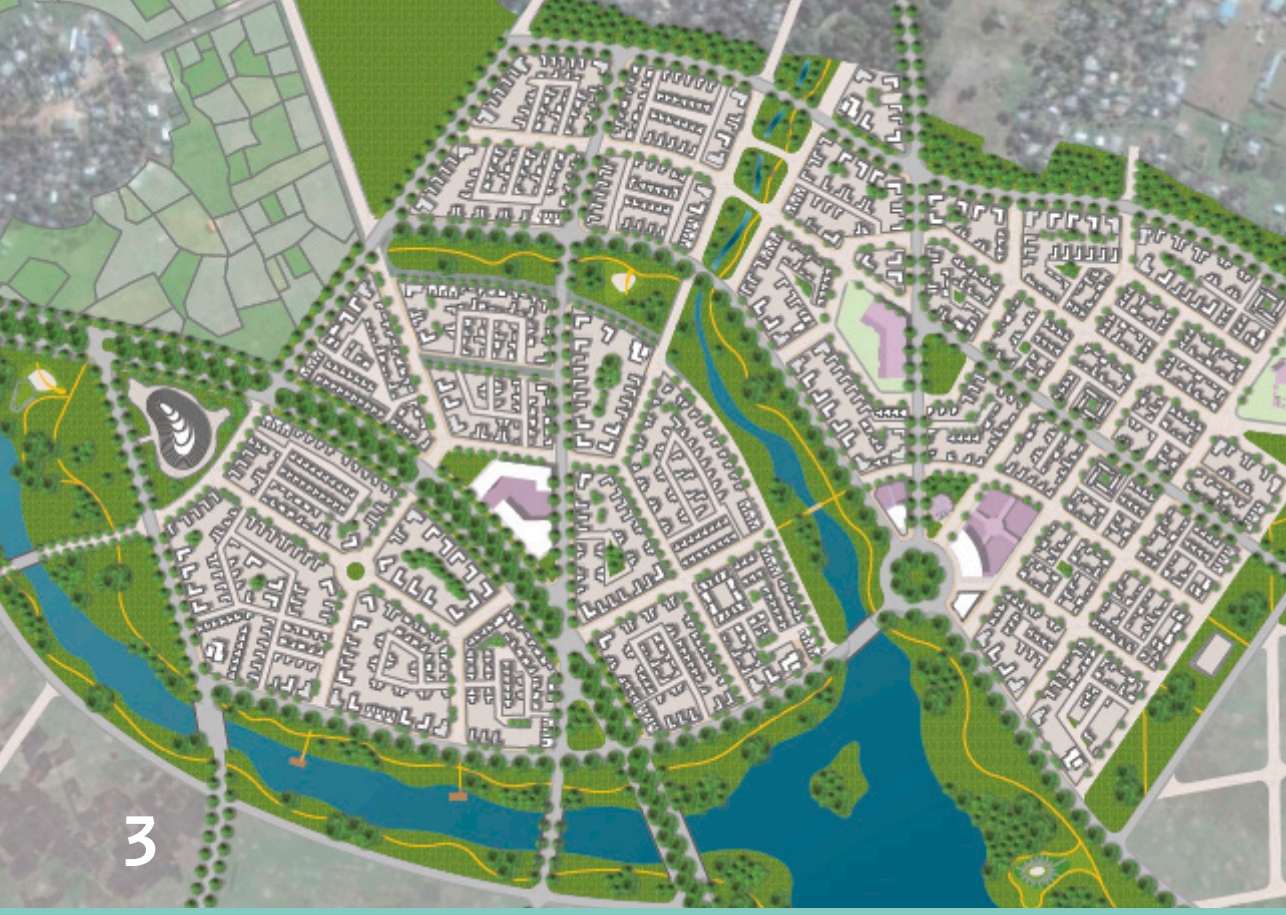
sector, climate change and investment, as set out in chapter 6 of the National Water Plan (MTPWWM, MHSPE and MANFQ, 2009, pp. 242-249). That plan recognised water as a Dutch 'top sector' and aimed to facilitate adaptation to climate change, contribute to the achievement of the Millennium Development Goals (MDGs) and create and exploit economic opportunities for the Netherlands. To help implement it, the Water Mondiaal programme was established. Water Mondiaal was described in the MFA's 2012 policy letter as 'an interdepartmental programme, implemented by the Ministry of Infrastructure and Environment with the participation of the Ministry of Economic Affairs, Agriculture and Innovation and the MFA, financed from the Integrated International Co-operation Group[6] and contributing to improved water management in five delta countries (Bangladesh, Egypt, Indonesia, Mozambique and Vietnam)[7], thereby building the profile of the Dutch water sector in those countries' (MFA, 2012a, p. 14). While the National Water Plan and related initiatives were not the direct responsibility of the MFA and are therefore not the focus of this evaluation, this suite of policies and instruments across the Dutch government for engaging in water management in developing and transitional countries was certainly relevant to the country's aid policy for the sector. The evaluation, and this Mozambique country study, therefore make due reference to these other programmes and activities.

By the end of the review period, the concept of 'aid policy' had thus become too narrow a perspective on the Netherlands' mode of engagement with developing and transitional countries in the field of water resource management. This was particularly clear in the 2016 International Water Ambition (IWA), a joint statement by the MFA, the MI&E and the Ministry of Economic Affairs (MEA) that called for 'a holistic international approach combining diplomacy, innovation, partnerships and new funding mechanisms' to tackle 'the scale, urgency and complexity of the water challenges the world faces' (MI&E, 2016, p. 4). The IWA emphasised the intended roles of Dutch water authorities, water supply companies, the Rijkswaterstaat public infrastructure organisation and the RVO. It stated that existing policy (such as the policy letter quoted above) remained valid and quickly acknowledged the need for 'connections with policy on agriculture/food, maritime issues, energy and climate', but then moved directly to focus on one challenge: 'urban deltas all over the world face major, urgent risks associated with water security' (MI&E, 2016, p. 5). Its main goal was therefore 'to enhance water security in urban deltas and to increase the Netherlands' contribution to these efforts (2016-2021)' (MI&E, 2016, p. 9). 'Contribution to' can also be read, of course, as 'commercial engagement in' efforts to enhance water security in urban deltas. Significantly also, the first of the three IWA 'pillars' is promotion of the Netherlands as 'a centre of excellence for water' – a clear statement of the intention to build Dutch 'soft power' in the sector (MI&E, 2016, p. 11).

6 "Since 1997 the Integrated International Co-operation Group (HGIS) has been a construction within the national budget, which bundles together the expenditures of different Ministries in the field of international policy... within HGIS a distinction is made between development co-operation expenditures that meet the criteria for ODA and other expenditures for international policy (non-ODA)" (GON, 2016). Technically, therefore, this evaluation and its country case studies must look beyond Netherlands aid (ODA) policy and funding.

7 Colombia and Myanmar were added later.

Dutch policy has generally exercised a degree of geographic licence in its references to deltas and urban deltas. The 'delta' branding is an inspired reference to the geography of the Netherlands itself, but few of the so-called 'delta countries' are dominated by one or more deltas to the same extent. While urban deltas are a major point of vulnerability for some partner countries, most notably Egypt and Indonesia, they cannot be the only, or even the principal, focus of water management concern in others. There are no urban deltas in Mozambique.



3

Findings

3.1 Dutch assistance to water management in Mozambique

3.1.1 Rationale

EQ 1: What was the rationale for Netherlands assistance to water management in Mozambique?

The overall rationale for Netherlands assistance to water management in Mozambique was supplied by Dutch global development co-operation policy, as well as evolving aid policy for improved water management (section 2.3 above), which reflected general policy developments such as the increasing attention to climate change and the growing emphasis on linking aid and trade objectives to benefit Netherlands interests as well as those of the poor in partner countries. In a 2013 policy statement, the MFA called for

'a new aid, trade and investment agenda. At international level, we are pursuing three important aims. First, to eradicate extreme poverty ('getting to zero') in a single generation; second, sustainable, inclusive growth all over the world; and third, success for Dutch companies abroad. In the field of aid and trade, we can identify three types of bilateral relationship, within which we will continue to focus mainly on our current partner countries (aid) and focus countries (trade).

Aid relationships. *Here, the focus is on countries that are unable to solve their poverty problems singlehandedly. This category includes conflict-affected and post-conflict countries, fragile states and countries with insufficient capacity to reduce poverty effectively without assistance.*

Transitional relationships. *Here, the focus is mainly on low- and middle-income countries with burgeoning economies. In a transitional relationship, a combination of aid and trade can benefit both the developing country and the Netherlands.*

Trade relationships. *Here, our main aim is to promote trade and investment, with activities that contribute to economic growth and employment in the Netherlands.'* (MFA, 2013, pp. 6-7).

The EKN's multi-annual plans (MASPs) provided a more detailed rationale for Dutch engagement in Mozambique, based on analysis of the situation in the country and on Netherlands policy. In 2006, at the start of the review period, the EKN in Maputo was in the second year of implementation of the 2005-2008 MASP. A major feature of the Dutch approach in Mozambique was already evident: commitment to sector budget support for the water sector, focusing until 2012 on drinking water and sanitation. So, too, was support for TWM, with efforts under way to agree a second phase of support for PRIMA and a proposal prepared for support to TWM in the Zambezi basin. The EKN's annual plan for 2006 also identified concerns that were to remain significant.

'The sector's weak capacity constrains urgently needed improvements. Capacity development and institutional strengthening at all levels are urgent priorities. The erratic and limited availability of investment

funds from the state budget, have further hampered the sector. Moreover, the sector is confronted with a rapidly increasing debt, because of outstanding VAT-payments to contractors. Operational harmonisation between donors in the sector remains insufficient.' (EKN, 2006, p. 5).

The **MASP for 2008-2011** noted Dutch decisions to focus the portfolio in the country, ending support for education, becoming 'leading in health [and] collaborative in water, where more attention will be given to improve rural water supply' (EKN, 2008, p. 1). The Netherlands had already left the environment sector in 2004. Presaging future concerns, the MASP noted that 'there is good macro-economic stability and overall growth in GDP, but growth is insufficiently pro-poor and many MDG's are far from being met' and 'developments in governance are mixed' (EKN, 2008, pp. 2, 3). Dutch support in Mozambique was framed by a widespread donor commitment to the principles of the 2005 Paris Declaration on aid effectiveness (EKN, 2008), with funding channelled partly to GBS (the Netherlands was one of 19 contributing donors) and sector budget support. The MASP spoke of 'sincere efforts in harmonisation and alignment. During the recent years impressive progress was made' (EKN, 2008, p. 4).

In the water sector, the 2008-2011 MASP noted the potential Dutch value added, but also noted the need for more coherent strategy.

'In water the Netherlands has a historical advantage and its knowledge and expertise are valued worldwide, including in Mozambique. However, given the dispersed portfolio of the Embassy itself, including limited sector support and several small and big projects, the lack of an overall sector strategy and the composition of the donors in the sector, including the ADB and the World Bank (both with large projects), a leadership role is not very promising at this time. In a future MASP a leading role for the sector as a whole can certainly not be excluded.' (EKN, 2008, p. 7).

The EKN noted the continuing need for what it called programme aid, i.e. sector budget support, in addition to GBS and 'modest project support to GOM', while aligning targets with those of the PARP's Performance Assessment Framework (PAF) and its sectoral result frameworks (EKN, 2008, p.11). For the water sector, it referred to two sets of objectives: first, rural and urban drinking water and sanitation targets (reversing an earlier emphasis on urban services with more support to rural ones); and secondly, regional co-operation in the management of shared river basins: 'by 2011 a more equitable and sustainable use of water resources in the SADC-region as a whole has been achieved', with specific reference to the joint management with South Africa and Swaziland of the Incomati and Maputo river basins (EKN, 2008, p. 11). Linked to the latter were commitments to support institutional and capacity development and the enhancement of technical approaches for river basin management.

The MASP for 2012-2015 highlighted the growing concern about equitable growth and standards of governance in Mozambique.

'Continued nation building, whereby Government primarily ensures accountability towards its citizens, is required if Mozambique is to benefit from its potential and take the route to sustainable development, rather

than fall into the resource trap, whereby environmental resources are depleted, the poor are further marginalized and impoverished and a limited elite class will amass wealth.' (EKN, 2011, p. 3).

It went on to plan Dutch withdrawal from GBS.

'...suboptimal results in poverty reduction, the uncertainties about the new PARP as well as continuing challenges in the fields of governance and the fight against corruption have led to the decision not to continue with General Budget Support (GBS) as an aid modality in the bilateral programme.' (EKN, 2011, pp. 5-6).

The MASP noted the alignment of the Mozambique programme with several Dutch programmatic 'spearheads', including water. In the water sector, 'the long-term sectoral engagement and solid Dutch position and relation with the Mozambican Government and the donor community provide the basis for further development and expansion' (EKN, 2011, p. 3). Reaffirming the Dutch commitment to the Paris Agenda and the Accra Declaration and hence to donor alignment and harmonisation efforts, it reported that the Netherlands would become the 'focal partner' for water in 2012. It noted that several Dutch water boards had established links with counterpart agencies in Mozambique, notably the Administração Regional de Aguas (ARA) Sul and ARA-Zambeze. Capacity building for ARAs would be an important contribution to improved water management under this MASP, which noted that although good policies and strategies were in place (developed partly with earlier Dutch support), institutional and technical weaknesses meant that planning and implementation in the water sector were ineffective. The institutional development of the National Water Directorate (Direcção Nacional de Aguas, DNA) was another major commitment.

The 2012-2015 MASP continued to emphasise support for improved drinking water and sanitation, calling for a stronger role for the private sector; while also noting Dutch-supported achievements in TWM through the WaterNet programme, which it planned to continue with the development of WaterNet into 'the regional centre for capacity development in Integrated Water Resource Management'. It also identified good prospects for an 'integrated development model' through linkages between initiatives in the water and food security sectors (EKN, 2011, p. 8). In water resource management, too, the MASP reflected increasing Dutch policy emphasis on roles for the private sector.

'Dutch private sector and semi-private operators can bring additional skills for fast delivery of results to the sector, providing integrated solutions for management of this global public good. This places the embassy in an excellent position to obtain development results, while striving for involvement of the Netherlands private sector and knowledge institutes... New in the MASP is the increased focus on the private sector as the engine of growth and the active promotion of Dutch capacity and private sector involvement.' (EKN, 2011, pp. 8-9, 12).

Echoing the concern of the previous MASP about 'parachute projects' introduced with central funding from The Hague and poorly co-ordinated with the ongoing bilateral programme of activities supported with delegated funds, the 2012-2015 MASP noted the large and growing number of Dutch organisations, funds, facilities and instruments becoming active in the Mozambique water sector, and argued that 'The strength of the Netherlands should not be weakened by uncoordinated initiatives. The embassy sees as its

primary responsibility to ensure coherence in Dutch interventions'. It also struck a warning note with regard to private sector engagement, which, it said, 'can be counterproductive for long term social development' (EKN, 2011, p. 19).

The last part of this evaluation's review period was covered by the MASP for 2014-2017. Against a background of strong economic growth prospects for Mozambique over the plan period, this MASP put stronger emphasis on commercial opportunities for the Dutch private sector:

'Dutch firms are well positioned to play a significant role in the next chapter in Mozambique's development, but competition will be fierce and the Embassy will need to continue and where possible expand its activities in the field of economic diplomacy to actively support Dutch trade and industry... It is against this background, full of major challenges, that the Embassy, through its MASP, will focus its work both on Mozambique's promising economy and the opportunities that exist for Dutch firms as well as on the contribution that the Netherlands will continue to make to Mozambique achieving the MDG's and the developmental goals of the post 2015 agenda. By the end of 2017 it is envisaged that a considerable number of Dutch companies are firmly established in Mozambique... Programs in the spearheads will be result-oriented, in which, more than before, public and private interventions go hand in hand.' (EKN, 2013, p. 1).

This MASP did note the limitations on commercial opportunities in the water sector, and committed further Dutch support for institutional development, while involving (semi) private partners and knowledge institutes as much as possible, reducing ODA and 'support[ing] development and investment in areas which are strategic for Dutch involvement... the Dutch Delta experience will be further applied and promoted in collaboration with the international finance institutes, as well as commercially... In the process from aid to trade several opportunities for engagement of the Dutch private sector and knowledge institutes exist' (EKN, 2013, pp. 1, 5).

Although it used slightly different wording, this MASP put water security and water safety at the centre of its strategy (against the background of Dutch support after the floods of 2013).

'Water availability (the right quantity and quality of water at the right place and at the right time) for social, productive and environmental use and water safety (safe deltas and river basins) are central in this MASP.' (EKN, 2013, p. 5).

It committed the Netherlands to further institutional development support for the DNA and ARAs, as well as international river basin organisations (RBOs), while also planning assistance to increase water productivity, particularly through the Zambezi Valley Development Authority and in the Beira Agricultural Growth Corridor (a zone where prospects for commercial development were stronger). The MASP noted the 2012 Memorandum of Understanding between the two governments on co-operation in the water sector (GOM & GON, 2012), 'which prioritises Mozambican and Dutch sourcing for investment and cooperation in the water sector. The recently established Mozambican Water Platform (PLAMA) is important for developing partnerships and to improve market access for the Dutch water sector... Economic water diplomacy efforts directed to the

Netherlands (semi) private sector partners need to be intensified… To facilitate the transition from 'aid to trade' substantial staff time will be devoted to encourage and support the broadening and intensification of partnerships between the Mozambican and Dutch (private) water sector. This role as broker will extend to partnerships with other financiers and international investors' (EKN, 2013, p. 6).

With this strong emphasis on promoting Dutch commercial interests, the 2014-2017 MASP envisaged stronger integration of programmes, notably in development corridors like the one stretching from Beira, and a reduction in the number of activities to about 20 by 2017. The ideal was to combine poverty alleviation efforts with partnership opportunities for Dutch entrepreneurs (EKN, 2013, p. 11). For this purpose, three 'detailed market scans' were proposed, to cover urban water supply and sanitation (the rural water and sanitation programme would be phased out); river basin management and safe delta technology; and water and agriculture. Continued institutional and technical support to DNA, ARA-Sul and ARA-Zambeze were envisaged, with the latter developing a productive operational partnership with the ZVDA. In TWM, it was intended that Dutch support would lead to the establishment of an international RBO for the Incomati and Maputo basins. Collaboration between ARAs and Dutch water boards would continue.

'The Dutch financed and developed Master Plan for Beira will provide several investment opportunities and development programs (financed by other parties) for Dutch knowledge and private sector partners. The Beira Master Plan process (linking development and project implementation with funding) is creating interest from other cities (and financers), providing future additional options for Dutch participation. ODA support might be required to unlock this potential.' (EKN, 2013, p. 12).

This most recent MASP did recognise the ongoing challenges of good governance and adequate institutional capacity, as well as levels of commitment by the relevant governments to effective TWM. With its stronger commercial focus, it also noted the challenge of attracting risk-averse Dutch firms into the difficult Mozambican business environment. As the number of ODA projects declined, the number of embassy staff was expected to fall by 2017: 'the embassy will be leaner and meaner' (EKN, 2013, p. 18).

The decision in the 2014-2017 MASP to phase out support for rural water supply and sanitation, and the greater emphasis on water resources management, marked a major shift in emphasis in Netherlands water sector support to Mozambique. As Table 3.1 shows, only modest funding was committed through the EKN before 2012 to water resource management activities, with the exception of support to TWM through PRIMA. WaterNet was supported from early in the review period, but that regional programme had no particular focus on Mozambique. Apart from TWM, therefore, this country case study must focus mainly on support from 2012 onwards.

In aggregate, these extracts from the MASPs for the review period show a triple rationale for Dutch support to water management in Mozambique. First, addressing the many weaknesses in the sector was a central strategy for improving the living standards of Mozambicans. Secondly, the strong reputation and many achievements of the Netherlands in

the sector were considered a good foundation for further contributions. Thirdly, as the review period went on, there was stronger emphasis on achieving benefits for Dutch economic interests through support to Mozambique. Given the timing, it is understandable that the 2015 Sustainable Development Goals (SDGs), to which both countries have committed themselves along with the rest of the United Nations, were not mentioned. The question at the end of the review period was whether they should receive more emphasis as a guiding framework for improving water resource management in Mozambique.

3.1.2 Modalities, instruments and mechanisms

EQ 4: What modalities, instruments and mechanisms did the Netherlands use in support to water management in Mozambique?

The Netherlands used several modalities, instruments and mechanisms in its support to water management in Mozambique. While some of these were not directly driven by the aid policy under review here, it is important to mention them all because aid policy implementation and performance were influenced by the existence and use of these other channels.

The EKN's delegated budget

As in earlier decades, the main modality for water management policy implementation continued to be **projects funded by the MFA through the EKN using budgets delegated from The Hague**. These projects, detailed in section 3.1.3 below, followed **three implementation arrangements**.

- The EKN made implementation arrangements with consulting companies, knowledge institutions such as Deltares, or Dutch water authorities. The Netherlands provided all or most of the funding. Supplementary amounts were provided in some cases by the implementing agency, the GOM or Netherlands water sector stakeholders or, in one case (the recently started Implementation of the Beira Master Plan (BMP)), PvW.
- Sector budget support, channelled through the EKN, was much more prominent in water sector arrangements with Mozambique than with the other case study countries covered by this evaluation. However, this was focused on drinking water and sanitation rather than water resource management. The importance of this modality was linked to the strong overall donor commitment in the early part of the review period to the Paris principles of 'on budget' support, with funding through the partner country's institutions, systems and programmes. By 2012, frustration had set in regarding the lack of positive, measurable results, and a shift was made to 'programmatic support' to the GOM's central water sector institution, the DNA (ACT-for-Performance BV, 2016, p. 16) – although the MFA appraisal memorandum for the new Apoio Sectorial ao Sector de Agua e Saneamento (ASAS) Phase V said that 'despite… the explicit objectives and milestones to be achieved, ASAS will be implemented as a sectoral budget support programme' (MFA, 2012b, p. 4). This was a revised modality in the prominent commitment, throughout the review period, to institutional development in the Mozambique portfolio.

- In the latter part of the review period, the MFA made increasing use of RVO as an implementing agency and administrative channel for activities funded through the EKN's delegated budget. Using the PvW facility (see below), this was done particularly for work associated with preparation of the BMP – the activity that emerged as best suited to the developing policy emphasis on broader engagement of, and potential commercial benefits for, the Dutch water sector.

As in other countries, most of the Netherlands' support for water resource management activities in Mozambique continued to be funded through the EKN's delegated budget. As Table 3.1 shows, EUR 49.5 million was budgeted through this channel. By far the largest activity supported in this way was ASAS Phase V, programmatic institutional development support to the DNA that followed four ASAS phases focusing on sector budget support to drinking water and sanitation[8], and added an emphasis on water security and water safety. The early curtailment of that activity, after disbursements of only EUR 6.8 million, is the main reason why total expenditure (EUR 32 million) was so much lower than budget; although Table 3.1 also shows some new projects that have not yet disbursed much. By contrast to the delegated budget, budgeted funding through PvW totalled only EUR 3.6 million, for a much larger number of activities – which immediately raises questions of transaction costs and efficiency, however individually useful some of those activities may have been.

Two other notable features of the Mozambique delegated water management portfolio are included in Table 3.1. Three phases of the regional WaterNet capacity development activity for the southern African water management sector are included in the AWM category, with a total budget of EUR 11.6 million (23% of the total). Mozambique was just one of the Southern African Development Community (SADC) countries benefiting from WaterNet. The activity was channelled through the EKN in Maputo for administrative reasons. Secondly, the multiple funding allocations for the Policy Support Fund (BOF – a general-purpose facility to assist the EKN in small expenditures, for example in project preparation or monitoring) were for all sectors of Netherlands development co-operation, and not only water management activities. Again for internal administrative reasons, the BOF fell under the responsibility of the water sector specialist in the EKN.

MFA central funding

In addition to this delegated funding, the MFA used central budgets in The Hague to support a number of global or multi-country activities that had links with water management in Mozambique. These activities are summarised in Table 3.2, which follows the overall classification of activities adopted by this policy evaluation (as outlined in section 1.1 above) and includes summary comments based on informants' views and the evaluation team's interpretation. Additional detail is given in Table III.2 at Annex 3.
The Sustainable Water Fund (FDW), a public-private partnership initiative funded by the MFA and administered on its behalf by RVO, supported one activity in Mozambique during the review period. This aimed at improved drinking water services in Beira and is therefore outside the scope of this country study.

[8] This is why earlier ASAS phases are not covered by this study and not included in Table 3.1.

Other instruments

Outside the direct responsibility of the MFA, other funding instruments linked to the Water Mondiaal initiative (section 2.3 above) were available to support improved water management in Mozambique. The Partners for Water Programme, administered by the Netherlands Enterprise Agency (RVO), offered funding through subsidies for initiatives by Dutch firms, research agencies, water authorities and NGOs – typically of several hundred thousand Euros. It also provided grants (usually but not always smaller) for commissioned activities, such as exploratory missions to develop linkages between the Dutch water sector and counterparts in Mozambique. Table III.3 at Annex 3 lists the 42 PvW subsidies and commissions used to support water resource management work in Mozambique during the review period. The evaluation team was unable to find complete information on all these activities, but the table includes summary comments based on interviews and the team's qualitative assessment.

The Facility for Infrastructure Development (ORIO), administered by RVO, was superseded in 2015 by Develop to Build (D2B) and the Development Related Infrastructure Investment Vehicle (DRIVE), with the former funding planning and preparations and the latter funding implementation of successful proposals from the D2B process. According to the RVO database, ORIO provided eight subsidies in Mozambique during the review period, five of which were in the water management sector, involving irrigation, flood control and drainage.

Nuffic (the Dutch organisation for internationalisation in education) supported seven projects in Mozambique through its Netherlands Initiative for Capacity Development in Higher Education (NICHE). Six of these concerned drinking water and sanitation, and the seventh, supporting capacity building for IWRM, began just after the end of the review period, in January 2017.

Although this country study finds that the expanding set of modalities and mechanisms available for Dutch support to water management was successfully applied in Mozambique during the review period (section 3.3.1), the consensus is that, overall, they are too complicated to be fully fit for purpose. A small team of expert managers are able to fit the funding opportunities and instruments together constructively, but this requires substantial administrative effort and leaves many stakeholders bemused or confused.

The EKN, the MFA and other agencies

The EKN remained central in the overall co-ordination of this increasingly diverse portfolio of facilities and (often small) activities. In this task, it was supported by Water OS – a facility set up by the MFA and implemented by the NWP and RVO that appointed a 'core adviser' to work with the responsible specialist in the Embassy and to promote the broader engagement of the Dutch water sector. The EKN also worked as part of a 'delta team' set up to co-ordinate Water Mondiaal work in the country. The other members of the 'delta team' were based in The Hague: in the MFA, the Ministry of Economic Affairs, the Ministry of Infrastructure and Environment, the RVO and the Netherlands Water Partnership (NWP).

As in support for Jakarta flood management in Indonesia, a focused management (regie-) team was set up to co-ordinate the various inputs and activities undertaken for the BMP. These teams were the nexus of the new mode of more entrepreneurial management that evolved to exploit and co-ordinate the increasingly diverse set of instruments and funding possibilities emerging towards the end of the review period. As part of this process, MFA policy elements were increasingly merged with the policy of other GON ministries. As policy converged, however, the modalities and instruments did not. A bigger management burden had to be tackled through these broader arrangements.

3.1.3 Water management interventions in Mozambique

MFA funding delegated to the EKN

EQ 5: What were Netherlands expenditures on water management activities in Mozambique, by year, by targeted geographic area (if applicable), by policy objective and by channel? What proportion of the expenditures was spent on contracts with Dutch water sector stakeholders?

Table 3.1 below shows the core of the portfolio under review: the series of Mozambique water management activities that the Netherlands supported with delegated funding through the EKN. The total amount budgeted by the Netherlands for this delegated portfolio was EUR 49.5 million. Total Dutch expenditure on these activities over the period was EUR 32 million. The difference is partly because some of the most recent projects still have several years to run, and some of the older ones incurred expenditures before 2006. In other cases, design and implementation issues discussed later in this report contributed to the underspend. Total expenditure per year ranged from EUR 2.1 million in 2008 to EUR 5.7 million in 2016.[9]

It should be noted that Table 3.1 shows the individual activities as recorded in the MFA's Piramide database. It includes activities with budgets under EUR 1 million, which are not the main focus of this evaluation but which are included because they are sometimes pertinent to the overall analysis of policy. The table shows those activities classified in Piramide with a main focus on water management.

Analysing the portfolio in terms of overall MFA policy objectives for support to water management is a complex challenge. As explained in section 1.1 above, this overall evaluation originally identified three broad policy objectives, which it has since refined. Table 3.1 below presents the delegated activities undertaken in Mozambique during the

[9] Total expenditures in 2006 and 2007 are not considered here, as the review's database of activities excludes those showing expenditures only in those years. This is because they are assumed to have been guided by policy developed before the review period started.

review period, set out according to the revised and more detailed categories. To assist cross-country comparison, it shows all these categories, including those to which no Mozambique activities were assigned.[10] [11]

Table 3.1 Water management projects: delegated funding, 2006-2016

No.	Project Name	Start	End	Project budget EUR	Expenditures 2006-2016[11] EUR
Water management in agriculture					
	Agricultural development				
Sub total				**-**	**-**
% of total				**-**	**-**
	Water productivity				
29078	Water Productivity	Jul 16	Jun 18	1,561,057	1,561,057
Sub total				**1,561,057**	**1,561,057**
% of total				**3%**	**5%**
(Sub) national water management					
	(Sub) national water management planning				
23928	TA Monitoring Protocol ASAS	Jan 12	Dec 13	17,981	17,981
24083	Development of Water Programme	Apr 12	Dec 14	129,726	129,725
24600	Sectoral Support Water ASAS	Oct 12	Dec 17	18,665,174	6,810,436
Sub total				**18,812,881**	**6,958,142**
% of total				**38%**	**22%**
	(Sub) national water management implementation				
	(River) basin management				
24499	Cooperation ARA-Zambeze	Oct 12	Jun 19	5,957,000	4,255,239
26681	Support to ARA-SUL	Sep 14	Dec 17	525,000	498,725
Sub total				**6,482,000**	**4,753,964**
% of total				**13%**	**15%**
	Coastal development				
29715	Implementation Beira Masterplan	Aug 16	Dec 21	1,500,000	492,902
Sub total				**1,500,000**	**492,902**

[10] Table III.1 at Annex 3 presents the same list of projects in chronological order of start date.

[11] Note that some projects spent some of their total budgets before 2006. Others that started recently will continue to disburse after 2016.

Table 3.1 Water management projects: delegated funding, 2006-2016					
No.	**Project Name**	**Start**	**End**	**Project budget EUR**	**Expenditures 2006-2016[11] EUR**
% of total				**3%**	**2%**
	Disaster management				
Sub total				**-**	**-**
% of total				**-**	**-**
Transboundary water management					
14548	IncoMaputo 2-PRIMA (Progressive Realisation of the IncoMaputo Agreement)	Aug 06	Dec 13	7,417,971	7,417,971
20248	Environmental Flows Zambezi	Jul 10	Dec 14	515,000	515,000
Sub total				**7,932,971**	**7,932,971**
% of total				**16%**	**25%**
Cross-cutting policy themes					
	Climate				
Sub total				**-**	**-**
% of total				**-**	**-**
	Good governance				
Sub total				**-**	**-**
% of total				**-**	**-**
	Gender				
Sub total				**-**	**-**
% of total				**-**	**-**
	Enviroment				
Sub total				**-**	**-**
% of total				**-**	**-**
Across water management themes					
17607	WaterNet Phase 2B	Jan 08	Jun 13	3,105,000	3,105,000
19909	IPIA (Instituto de Promocao de investigacao em Aguas)	Apr 09	Dec 14	337,740	337,740
24100	External Support in Pre-award Organizational Assessments	Apr 12	Dec 13	26,798	26,798
25152	WaterNet Phase 3	Jan 12	Dec 17	5,790,563	5,403,964
26782	Spearhead & Crosscutting BOF	Jul 14	Jul 18	1,257,809	602,277

Table 3.1 Water management projects: delegated funding, 2006-2016					
No.	**Project Name**	**Start**	**End**	**Project budget EUR**	**Expenditures 2006-2016[11] EUR**
29569/ 29729	WaterNet Phase 4	Dec 16	Dec 22	2,700,000	900,000
Sub total				**13,217,910**	**10,375,779**
% of total				**27%**	**32%**
Total			**EUR**	**49,506,819**	**32,074,815**

Due to rounding, percentages may not appear to add up to 100%.

Spanning this diversity, and overlaid across the three main policy objectives outlined above, are the concepts of water safety and water security. The former is a prerequisite for the latter, and is fundamental to the wellbeing and the future of Mozambique, which has suffered grievously from major floods, for example in 2000 and 2015. The broader concept of water security includes water safety but addresses the many challenges of ensuring appropriate levels of water availability and quality for agriculture and all other human endeavours – as well as the social dimensions of equity in water access and use.

Table 3.1 shows that (sub) national water management planning received 38% of the total delegated budget allocation over the review period, while 16% of the total delegated budget was allocated to (S)NWM implementation. Because of the partial suspension of ASAS, planning constituted 22% of disbursements, and implementation (including one large project that only started in 2016) 15%. The broad category of water management in agriculture received only 3% of the total delegated budget. Finally, 27% was allocated to cross-cutting activities across water management themes – dominated by the regional WaterNet project, which is funded through the EKN in Maputo but has no special focus on Mozambique.

MFA central funding

In addition to the activities supported with delegated MFA funding through the EKN, it is also necessary to consider the MFA's centrally funded activities that had links to Mozambique. Table 3.2 below summarises these activities. Additional detail is given in Table III.2 at Annex 3. The tables show the full set of activity categories and sub categories adopted by this global review (section 1.1); for some (sub) categories there are no centrally funded activities relevant to Mozambique. They combine information obtained before the country mission from the available documentation, with findings obtained in country, mainly from interviews at the EKN. (Again, see Table III.2 for further detail.) In addition to the commentary provided in the two tables, various references are made to centrally funded activities in later sections of this report.

Table 3.2 shows that linkages between these centrally funded activities and the much larger delegated programme, and the perceived significance of these activities for the Mozambique water management portfolio, varied. As reporting on these centrally funded activities is not broken down by country of expenditure, it is not possible to say what MFA expenditures through this channel were in Mozambique. Nor do available data permit analysis of these activities by water management policy objective or by area within Mozambique where activities may have been supported.

Some of this central funding was a Dutch contribution to programmes of international partnerships like the Global Water Partnership. Some of the activities, such as the Global Water Partnership, have a clear profile in Mozambique. But others, such as IUCN's Water and Nature Initiative and IWMI's Comprehensive Assessment of Water Management in Agriculture, do not appear to have achieved lasting results in Mozambique and show little linkage with the delegated programme. Another big global facility – UNESCO-IHE – is still seen as important from the Maputo perspective. It remains central to the theme of Dutch 'soft power' in the water sector, as does the newer Young Experts Programme (YEP).

Table 3.2 MFA centrally funded activities with links to Mozambique: summary

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[12]
Water management in agriculture					
Agricultural development					
IWMI Comprehensive Assessment	Apr 02-Dec 09	WWF Dialogue on food, water and environment	Through the Comprehensive Assessment of Water Management in Agriculture, co-funded by NL, IWMI aimed to identify knowledge on WM and to evaluate benefits, costs and impacts of water development and challenges (IWMI, 2017). Mozambique was one of the countries involved. The book was published in 2007 (Molden, 2007).	Not applicable.	Not significant
WWF Dialogue on Food, Water and Environment	Jan 04-Dec 08	IWMI comprehensive assessment GWP WANI Environmental Flows CIWA	WWF was one of the members of a consortium aiming to build bridges between agricultural and environmental communities on water resources issues. Local dialogues took place in the Lower Zambezi Basin on water allocation issues. The project proposed three main solutions: • System of Rice Intensification (SRI) (WWF, 2007). • Small water structures, fitting in local context • Focus on water conflicts on local and national scale	Environmental Flows in the Zambezi. No evaluation found.	Not significant, the original project was planned until September 2005, but was extended three times (budget neutral)

Table 3.2 MFA centrally funded activities with links to Mozambique: summary

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[12]
Water productivity					
ASAP (Agricultural Smallholder Adaptation Programme)	Nov 12-Dec 17	(GIZ activities)	ASAP was developed by IFAD to make smallholder farmers more climate resilient. It has an activity in Mozambique on pro-poor value chain development in the Maputo and Limpopo Corridors (PROSUL) to improve the climate-smart livelihoods of smallholder farmers in the Maputo and Limpopo corridors, comprising 19 selected districts in Gaza, Inhambane and Maputo Provinces (20,350 beneficiaries). Its expected outcome is a sustainable increase in the incomes of farmers producing irrigated vegetables, cassava and livestock including cattle, goats and sheep. (IFAD, 2017). PROSUL had a slow start, with many delays on signing agreements and receiving approvals, recruiting staff. Some preparatory activities have started.	Ongoing. The 2016 mission report labels the project as an Actual Problem Project, but it is fairly on course to meet most of the targets.	Moderately significant (NL supports ASAP, not Prosul directly)
Water Grand Challenge: Securing Water for Food	Jan 14-Dec 19	Water Watch (Eleaf) Water Productivity Potential synergy with other NL acts: +/- (for both SWFF activities)	Securing Water for Food sources and accelerates innovations that enable the production of more food with less water and/or make more water available for food production, processing and distribution. The 4th call for proposals was launched in 2016 (SWFF, 2018).	Ongoing. Technocratic, legal obstacles for flying drones resolved (license obtained). The SWFF sets strict sustainability targets.	Moderately significant.
(Sub) national water management					
(Sub) national water management planning					
no activities					

Table 3.2 MFA centrally funded activities with links to Mozambique: summary					
Activity name	**Period**	**Links with other Netherlands-funded activities**	**Implementation**	**Follow up, sustainability**	**Significance for co-operation benefits[12]**
(Sub) national water management implementation					
(River) basin management					
IUCN Water and Nature Initiative (WANI)	Jul 01-Dec 12	GWP DUPC WaterNet Sustain-Africa	Central in the Water and Nature Initiative of IUCN stood the implementation of IWRM through an ecosystem approach within river basins. Its goal was to mainstream the ecosystem approach, in which the concept of environmental flows was key, into catchment policies, planning and management. Mozambique was one of the riparian countries of the Limpopo river basin in which WANI developed a demonstration project on managing flows for sustainable development (IUCN, 2009).	IUCN has an ongoing water programme focusing on IWRM implementation, good governance, inclusive green growth, infrastructure for climate change adaptation, ecosystems resilience and building partnerships.	Not significant
Coastal development					
no activities					
Disaster management					
Dutch Risk Reduction Team (DRR)	Jun 13-Dec 17	ORIO PvW PLAMA	DRR executed a scoping mission on flood control in the Licungo Basin. Earlier work in the Limpopo Basin helped to shape the overall DRR approach.	Concepts of integrated flood management as advocated by mission included in project documents of intended investment projects with donors and in ongoing projects; probably increased chances of Dutch companies in tenders; team leader now adviser on flood issues at GOM. Interesting market for NL.	Moderately significant

Table 3.2 MFA centrally funded activities with links to Mozambique: summary

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[12]
Transboundary Water Management					
SADC-HYCOS II	Mar 03-Dec 13	Flood Management and Mitigation Programme of the Mekong River Commission (MRC)	After the first phase (1998-2001), in which Mozambique participated as well, the country was involved in the second phase in which hydrological and meteorological data collection platforms were installed. The goal of the project was to establish capacity of countries involved to assess status and trend of water resources, by using these platforms and establishing hydrological databases and information systems. Main output: 43 Data Collection Platforms. Most planned outputs were achieved (Rhebergen, 2010).	Follow up: Database Piramide contains the activity 'SADC HUCOS Phase III' (2009-2014) (activity no. 20097), but the project ended with a disbursement of EUR 0. Sustainability: project output oriented; in combination with the delays the project faced, sustainability could not be assured within the implementation period.	Not significant, conventional rain gauges could replace the advanced stations.
CIWA World Bank 2013-2020 (Cooperation in International Waters in Africa)	Jul 13-Dec 21	Nile Basin Initiative	The World Bank administers a multi-donor trust fund for the CIWA programme, which was launched in 2011. The programme aims to support riparian countries in developing sustainable, inclusive and climate-resilient growth in transboundary river basins. One of these river basins is the Zambezi river basin. The total amount allocated to the Zambezi River was EUR 13.4 million to support ZAMCOM and the Zambezi River Authority (ZRA), develop and improve basin plans, infrastructure (hydro-electricity at Batoka Gorge and rehabilitation of the Kariba Dam). The programme is assessed to be successful in strengthening cooperation in transboundary waters and advancing investments. In addition, the programme has been very cost efficient in its management (Pegasys, 2015).	The programme provides a range of support that helps to unlock the potential for sustainable and climate resilient growth within the continent by addressing the constraints to cooperative management and development of international waters (Pegasys, 2015, p. vii).	Significant

Table 3.2 MFA centrally funded activities with links to Mozambique: summary					
Activity name	**Period**	**Links with other Netherlands-funded activities**	**Implementation**	**Follow up, sustainability**	**Significance for co-operation benefits[12]**
Cross-cutting policy themes					
Climate ((change) adaptation and mitigation					
LDCF for climate change (GEF-UNDP)	Sep 12-Dec 17		The Least Developed Countries Fund (LDCF) has been established to support a work programme to assist LDCs in prepare and implement National Adaptation Programmes of Action (NAPAs). The NAPA for Mozambique was approved by the Council of Ministers in 2007 (MICOA, 2007) and implemented by the Ministry of Environment (UNFCCC, 2014). Evaluation does not provide evidence about the effectiveness of the implementation activities per NAPA, but progress seems slow and doubtful.	Ongoing	Not significant
Good governance					
Water Integrity Network (WIN)	Jul 14-Dec 17	ASAS	WIN was founded by IRC, SIWI, Swedish Water House, Transparency International and the WB Water and sanitation programme and is a network to promote water integrity, to reduce corruption and to improve water sector performance worldwide. Mozambique has a country programme executed by HELVETAS and partners focusing on the promotion of integrity in budget allocation and investment decisions in local service provision (WIN, 2017). The corruption scandals in Mozambique offered a window of opportunity for WIN. IRC became the implementing partner and progress is as planned.	Potential institutionalisation / upscaling (+/-)	Moderately significant
Gender					
no activities					

Table 3.2 MFA centrally funded activities with links to Mozambique: summary					
Activity name	**Period**	**Links with other Netherlands-funded activities**	**Implementation**	**Follow up, sustainability**	**Significance for co-operation benefits[12]**
Environment					
no activities					
Across water management themes					
Global Water Partnership activities					
Global Water Partnership	Jan 02-Dec 17	WaterNet WANI DUPC	Promotes IWRM, notably through Global Water Partnership Southern Africa (GWPSA), in 2000 launched as the first regional GWP centre, and the Mozambican Country Water Partnership (MCWP). GWPSA is a multi-stakeholder platform which advocates, facilitates and supports sustainable WRM in 12 countries of the SADC Region (Global Water Partnership Southern Africa, 2017). Mozambique and specifically the Limpopo river was involved in the Water, Climate and Development Programme (WACDEP) (MTR 09-13) Also, NL supported a GWP programme (2005-2011) 'IWRM Planning Process in 6 countries', of which Mozambique was one (Munguambe *et al.*, 2012). For Mozambique, a National Water Resources Management Strategy was developed and approved, though implementation was delayed.	Sustainability: the several initiatives to integrate IWRM have resulted in plans and awareness.	Significant

Table 3.2 MFA centrally funded activities with links to Mozambique: summary					
Activity name	**Period**	**Links with other Netherlands-funded activities**	**Implementation**	**Follow up, sustainability**	**Significance for co-operation benefits[12]**
Knowledge institutions' activities					
WaterNet	Apr 05-Sep 10	UNDP Cap/Net DUPC WANI	WaterNet is a programme for the SADC region to enhance institutional and human capacity in Southern Africa in the field of IWRM through training, education, and research by harnessing the complementary strengths of institutions in the region. Mozambican students have been involved in the programme. Overall, the WaterNet programme did very well in delivering on its mandate and objectives. The mandate and objectives are in line with the overall strategic direction of the SADC Water Sector and AMCOW. (Pegasys, 2011)	In order to remain effective, the secretariat needs to play a strong coordination role. Impacts are not clear. Follow-up: WaterNet phases IIb, 3 and 4 (which are delegated activities – see Table 3.1).	Significant

Table 3.2 MFA centrally funded activities with links to Mozambique: summary

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[12]
Programmatic support for UNESCO-IHE (Partnership for water education)	Jan 02-Dec 20	WaterNet GWP WANI PRIMA ASAS (staff members) Water Productivity Partners for Water Support to the ARAs	Through DUPC (DGIS-UNESCO-IHE Programmatic Co-operation), support is provided for UNESCO-IHE activities in many countries in order to try to find a solution in the lack of water management capacity in Africa and the Middle East. This must be achieved through education, research and innovation, supporting regional and local partnerships and policy forum activities (bemo 17133). Amongst others, activities in Mozambique are: • Transboundary data and rainfall prediction based on internet data sources; • VIA Water innovation programme; • POWER2FLOW, Hydropower-to-environment water transfers in the Zambezi Basin; • Risk-based operational water management for the Incomati River Basin, surface and groundwater; • Water Mondiaal Workshop (UNESCO-IHE, 2015). Another UNESCO-IHE project is the IHE Water Sector Capacity Building in support of the MDGs (WaterMill), executed in 2004 to 2009. WaterMill educates local experts at postgraduate (MSc) level on environmental science, water management, municipal water & infra and water science and engineering. In Mozambique research was conducted on good governance (van der Zaag *et al.*, nd).	Ongoing.	Significant

Table 3.2 MFA centrally funded activities with links to Mozambique: summary

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[12]
Multi-donor trust funds					
Water Partnership Programme (WPP)	Jan 09-Oct 16	Beira Master Plan Environmental Flows CIWA	'The Water Partnership Program (WPP) is a partnership between the WB and the governments of the Netherlands, the United Kingdom, Denmark, and Austria, working together to end poverty and boost shared prosperity through support to investments and analytical work in the water sector.' (WPP, 2016, p. 13). Activities conducted in Mozambique are Water Expert Team (WET) assignments on disaster risk management such as reduction of flooding hazards and flood control and urban planning in Beira like the rehabilitation of the drainage system in the city (WPP, 2016). WPP also financed a multi-sector investment options analysis for the Zambezi.	Knowledge products developed by WPP are often used by clients once activities are completed. Follow-up: rehabilitation of drainage system in Beira.	Significant
Promotion of engagement of Dutch water sector					
NWP Young Expert Programme (YEP)	Nov 12-Sep 17	ASAS SWFF Support to ARAs	This programme assists young Dutch and developing country professionals to work on projects in the water and food security sectors. In Mozambique, 12 young experts, 8 Dutch and 4 Mozambican, were active or have graduated from the programme in the water sector in Mozambique (YEP, 2017). Local as well as Dutch institutions, both private and public, are very positive about the programme, which helps the involved institutions to build their capacity	Ongoing. Perspective for continuation: + Potential institutionalisation / upscaling: +/- Difficult to keep YEP people after the programme ends.	Significant

This table is structured according to the categories adopted by the overall policy evaluation (section 1.1). The 'Implementation' column combines information obtained from documentation and from informants in Mozambique. Additional detail is given in Table III.2 at Annex 3.

[12] This assessment of relevance is based on the evaluation team's interpretation of responses from EKN informants and other Indonesia stakeholders.

Centrally funded activities include the World Bank's Water Partnership Programme (WPP), and its Co-operation in International Waters in Africa (CIWA) initiative, both of which have reportedly made useful contributions in Mozambique. The Least Developed Countries Fund for tackling climate change, to which the Netherlands also contributed, does not appear to have achieved significant results for Mozambique so far.

Available data do not permit a complete answer to EQ 5 (see above), although Table 3.1 provides some of the information for the delegated budget. That budget remained the dominant funding channel for cooperation with Mozambique on water management. PvW funding (budgeted at EUR 3.6 million, with disbursements of EUR 3.5 million) was much less than the EUR 49.5 million committed to the delegated budget. PvW funding strengthened the involvement of the Dutch private sector in Mozambique water management activities, with some contributions from Dutch water authorities' own international budgets. At the end of the review period, the commitment from the delegated budget for implementation of the Beira master plan offered additional potential for Dutch companies to engage.

3.1.4 Monitoring and evaluation

EQ 6: How has Dutch support for water management in Mozambique been monitored and evaluated? What evaluations are available, and what are the main issues and lessons that they report?

Table 3.3 below sums up what is known about MTRs and evaluations of projects undertaken during the review period in Mozambique with delegated funding and budgets over EUR 1 million. It should be noted that, where the table does not report an MTR or evaluation of a project, this means that the evaluation team has been unable to trace any such document. It is not conclusive evidence that no such MTR or evaluation ever took place. The available information suggests that no full evaluations were undertaken of any of the activities supported with delegated funding during the review period. Thematically, with reference to Table 3.1, the four MTRs shown span (sub) national water management planning (ASAS); (sub) national water management implementation (cooperation ARA-Zambeze); and 'across water management themes' (two MTRs of WaterNet).

Relevant findings from those evaluations that are available are included in the appropriate parts of this country study report. As pointed out in section 3.1.3, EUR 3.6 million was committed through PvW for a total 42 activities. Although PvW III as a whole was recently evaluated (te Riele et al., 2016), it has not been possible to trace evaluations of any of these individual subsidies or commissions.

All the major implementation channels for the portfolio under review – from the MFA in The Hague, delegated via the EKN and through activities managed by RVO – have their specific supervision, monitoring and reporting procedures. Overall, however, there is a lack of coherence in overall reporting and assessment of Dutch support to water management in Mozambique. As modalities and mechanisms multiply, the overall co-ordination challenge increases. The EKN's annual reporting has been brief and has not offered an adequately reflective overview of performance and the issues arising from it. It appears now to have been folded into the bullet-style presentation of an annual plan (EKN, nd). It is supplemented by the annual result 'fiches', in which the EKN enters performance data and a few lines of explanation or commentary. These follow templates, and must report on indicators, that are defined by MFA at central level – often causing considerable difficulty for EKN staff who lack the data for some indicators or consider them inappropriate for work in the country to which they are posted. In addition, one example has been found of a Mozambique Annual Plan for Delta Co-operation with Mozambique, 2016-2017 (Deltateam Mozambique, 2016). Apparently prepared by three staff based in The Hague, it does not show any authorship by personnel at the EKN. Written in Dutch, it includes two pages on 'experiences and lessons from 2015'.

Table 3.3 MTRs and evaluations of projects with delegated funding (budgets > EUR 1 million)

Project	Co-financed	MTR	Evaluation	Comment
Progressive Realisation of the Incomaputo Agreement (PRIMA)	-	-	-	PRIMA has never undergone an external or independent review. In 2013 a narrative report was produced.
WaterNet phase 2b	√	√	-	Mid-term evaluation in 2011 of phase IIa and IIb.
Cooperation ARA-Zambeze	-	√	-	Mid-term evaluation in 2017 (Portuguese, only summary in English). EKN had visited Tete in 2014 and produced a report.
Sectoral Support Water ASAS	-	√	-	Mid-term review in 2016, combined with a value for money study.
WaterNet phase 3	√	√	-	Mid-term evaluation of phase III.
Spearhead & Crosscutting BOF	-	-	-	This activity comprises a series of unrelated activities.
Water Productivity	-	-	-	Recently started.
Implementation Beira Masterplan	√[13]	-	-	Recently started.
WaterNet phase IV	√	-	-	Recently started.

[13] Co-financed by Partners for Water.

3.1.5 Reflection of Dutch water management policy in Mozambique interventions

EQ 2: To what extent, and how, was evolving Dutch water management policy reflected in engagements with Mozambique?

A key question for this evaluation is the extent to which evolving Dutch water management policy was reflected in engagements with partner countries – in this case, Mozambique. For this country, it is particularly important to recognise two interrelated strands of Dutch policy, to see how engagements with Mozambique reflected them both, and to assess what this meant for support to improved water management there. The first strand of policy is the general one directing Dutch relationships with 'developing' countries. Section 3.1.1 above quotes the 2013 policy statement that distinguished aid, transitional and trade relationships, placing Mozambique in the 'transitional' category, although support for poverty alleviation was planned to be the focus for 'the next few years' (MFA, 2013, p. 27). Secondly and more specifically, as shown in section 2.3, policy for support to water management evolved over the review period. Consistent support for IWRM principles accompanied a steadily stronger emphasis on water as a Dutch 'top sector'. Policy responsibilities and instruments were diversified across the GON, so that MFA policy and programmes became only part of the picture. There were increasing efforts to involve more of the Dutch water sector in overseas co-operation activities: building increased trade into aid relationships for the partner countries' mutual benefit and working towards a future when interaction would, ultimately, be purely commercial.

Section 3.1.1 above summarises what the successive MASPs produced by the EKN over the period said about support to improved water management in Mozambique. Mozambique became one of the 'delta countries' on which Dutch water management support came to be focused. Towards the end of the review period, the Mozambique Delta Team stated that:

'Delta Co-operation (DC) supports Mozambique in controlling water risks better. It also aims to create opportunities for the Mozambican and Dutch private sectors and knowledge institutions to play a role in this. DC operationalises the Netherlands International Water Ambition in Mozambique... Future natural gas revenues will enable Mozambique to invest more in water security and become less dependent on donor assistance. DC aims to prepare for that era. In addition, various climate funds... will become available for climate change mitigation and adaption. Mozambique will have to prepare itself for that too. DS can support Dutch and Mozambican firms in positioning themselves for these funds. The development of climate resilient cities is an important theme for these funds, matching the Dutch International Water Ambition.'
(Deltateam Mozambique, 2016, p. 1).

The Delta Team's 2016-2017 plan just quoted went on to state that it was guided by the IWA in identifying three core themes: the inclusive, climate-resilient and sustainable development of the 'delta city' Beira; inclusive, climate-resilient and sustainable development of other coastal cities, notably Palma; and strengthening of PLAMA, the Mozambican Water Platform

for commercial development by the private sectors of the Netherlands and Mozambique in the field of water resources (Deltateam Mozambique, 2016, p.2). The IWA states explicitly that it complements existing policy, which has not been abandoned. But the policy focus of this 'delta' co-operation was clearly on water resource management for sustainable urban development in coastal locations, with due IWRM attention – at least in theory – to these areas' catchments and hinterlands. Although not quite so focused on commercial opportunities and 'delta cities', the EKN's MASP for the corresponding period reflected the IWA in broadly similar ways and, as noted in section 3.1.1 above, spoke explicitly of facilitating 'the transition from 'aid to trade''.

Overall, Dutch water management policy was thus well reflected in engagements with Mozambique. The Mozambique portfolio mirrored the simultaneous narrowing and broadening of Dutch water management policy: through a focus on 'delta countries' (geographically, a rather casual way of describing the seven nations in question) to a tighter emphasis on 'urban deltas' and their hinterlands; while the number of Netherlands ministries, stakeholders, instruments and mechanisms in this narrower effort expanded significantly.

Nevertheless, when compared with the water management portfolios in other countries selected for focused study by this evaluation, activities over the review period in Mozambique are striking for their focus on institutional development. This is the 'softest' portfolio among the four country case studies, with its extended efforts to build the capacity of the DNA, mainly through the (curtailed) fifth phase of ASAS support and the growing emphasis on stepping sideways from national government to strengthen the development of ARAs, notably ARA-Sul and ARA-Zambeze. (The substantial expenditure through the EKN in Maputo on the regional WaterNet programme was also focused on capacity building.) Only towards the end of the review period, recognising the difficulty of achieving meaningful, measurable and sustainable institutional results, did the EKN begin to reorient the delegated programme to include more practical implementation of water management measures, in both rural and urban settings.

3.1.6 Water productivity, water security and water safety

EQ 3: Did Dutch support for water management in Mozambique achieve an appropriate balance between water productivity and water security and safety initiatives?

For the Mozambique portfolio of Dutch support to water management, another kind of balance needs to be considered before the evaluation question shown in the box above is answered. This concerns the balance between institutional development and sector support, on the one hand, and practical, field-level operations, on the other. The former was categorised in Table 3.1 as (sub) national water management planning – this category included the major commitment of institutional development support through ASAS – and

(river) basin management. The latter operations, emerging more at the end of the review period, fell largely under coastal management (implementation of the Beira master plan) and water management in agriculture: water productivity. While ASAS support for the DNA, and the gradual strengthening of ARA-Zambeze and ARA-Sul, may indirectly have aided practical measures to improve water productivity, water security and water safety, they achieved relatively few tangible results. The perceived imbalance led to an adjustment towards the end of the review period, as more emphasis was put on practical interventions in the portfolio. The overall dominance of 'soft' activities was further increased by the inclusion in the Mozambique portfolio of substantial investment in the regional WaterNet programme.

For good reasons, water safety was a prominent rationale for Dutch support to water management in Mozambique. Concern to reduce flood hazards underlay the funding for PRIMA, although TWM had other objectives too. It was also a significant concern in funding for the Beira Master Plan, through the delegated budget and through PvW. Better water security for Mozambican livelihoods and economic development was the ultimate objective of institutional development efforts with DNA and the ARAs. But, as noted above, this did not mean focused action whose practical results could readily be identified. The Netherlands did undertake more focused action, in consultation with DNA, ARA-Sul and the World Bank, to help develop practical responses to the floods that afflicted southern Mozambique in 2013. In the same year, responding to a request from the MFA, the RVO set up a global Dutch Risk Reduction (DRR) Facility Water. Also in 2013, a Dutch scoping mission on technical assistance for improved flood mitigation through integrated land and water management in the lower Zambezi valley took place (De Sonneville et al., 2013); and, just before the DRR was formally established, PvW funded a scoping mission on flood recovery in the Limpopo basin This led to a round table meeting later that year on flood management in the Limpopo basin (Krekt et al., 2014). However, that attempt to encourage the Mozambican authorities to consider Dutch approaches to flood management was reportedly unsuccessful, possibly because of various difficult issues in the relationship between the EKN and DNA at the time, linked to possible resentment in the DNA of what were perceived as an overbearing Dutch approach to the development of appropriate (participatory) systems.

In 2015, following severe floods in the Licungo basin in Mozambique, a DRR team carried out a scoping mission (DRR Team, 2015). Informants expressed appreciation for the support received from the Netherlands in those two years. The recent MTR of the DRR Facility criticised poor co-ordination of the Dutch input with support from other agencies, notably the World Bank (Krijnen & Heun, 2016, p. 43). Other information suggests that this was a misunderstanding of the way Netherlands and World Bank representation was combined, while reporting was separate. Since 2014, the Japan International Co-operation Agency has also been support disaster and flood management planning for the Licungo basin.

Meanwhile, it was only at the end of the review period that Dutch water management support returned more specifically to water productivity in the agricultural sector, with a project aimed at increasing the efficiency of irrigated production by 55 small commercial

farmers supported by the ZVDA. (This had been preceded by three years of support to small-scale irrigation through the EKN's Food Security sector, implemented with a United States NGO, International Development Enterprises (IDE).)

Considering the gravity of Mozambique's water security and safety challenges, the balance in Dutch support between action on those challenges and efforts to enhance water productivity was arguably appropriate. But the practical results of that support for water security and safety are hard to demonstrate because it was largely delivered through diffuse institutional development and budget support programmes. More significant is the shifting balance between such programmes and practical action at field level, in rural and urban areas.

3.2 Effectiveness

Evaluation questions 7-26 in the ToR for this country study concern various aspects of effectiveness. This section sets out the study's findings with regard to those EQs. As in section 3.1, each sub-section starts by showing the EQ(s) to which it responds.

3.2.1 Water management in agriculture

The ToR pose four EQs about water management in agriculture (see box below). The presentation on water in the Mozambique MASP for 2014-2017 noted that 'water and agriculture synergy, is the least developed subsector, but is part of our ZVDA programme, where a subcontract for development of small scale irrigation has been awarded' (EKN, 2013, p. 12). This was the project with IDE, implemented through the EKN's Food Security sector, that was mentioned above.

EQ 7: Did Dutch support contribute to an enhanced water management regime (appropriate infrastructure, technically appropriate and sustainable operating systems, transparent financial management and durable local institutions) for crop production in Mozambique?
EQ 8: Did Netherlands support to an enhanced agricultural water management regime contribute to increased water security and agricultural productivity in Mozambique?
EQ 9: In Mozambique, did Dutch support enhance the national and local institutional environment for and capacity of water users for participatory and transparent operation and maintenance (O&M) of water infrastructure?
EQ 10: In Mozambique, did Netherlands support augment the abilities of individual farmers to use representation, knowledge and skills to improve their access to water and their on-farm (water) management?

Again through the EKN's Food Security sector, the Netherlands also contributed to the Innovative Approaches Facility of the Beira Agricultural Growth Corridor initiative (BAGC; Carnegie Consult, 2013b), which also aimed to expand irrigation infrastructure for smallholders through links with the World Bank-funded Sustainable Irrigation Development Project (PROIRRI; see Table III.3). Major implementation challenges arose for the BAGC in 2014 and 2015, although it was reported that 'the highlight in 2015 in terms of development impact achieved is the fact that 43,881 farmers have been provided with access to irrigation, modern inputs, finance and/or a market (versus a target of 5,000), of which 37% are women.' But this was 'largely due to seed sales'; the extent to which irrigation efficiency was enhanced is unclear (DFID, 2016, p. 3).

Central funding from The Hague supported the Securing Water for Food (SWFF) initiative under the Water Grand Challenge: in Mozambique, this funded the introduction of flying sensors to help farmers measure water stress in their crops and enhance the efficiency of water use. Informant opinions differ as to the affordability of this technology for Mozambican farmers. SWFF also funded an innovative expandable greenhouse, targeted mainly at female farmers and helping them to save water – reported to have saved them 770,000 l of water so far. Indirect Dutch assistance also reached Mozambique farmers through the IFAD Agricultural Smallholder Adaptation Programme (ASAP), with its Pro-Poor Value Chain Development Project (PROSUL) in the Maputo and Limpopo Corridors, aiming to improve the climate-smart livelihoods of smallholder farmers in those areas – with mixed results by 2016 (Table 3.2; Table III.2; SWFF, 2017a; SWFF, 2017b; IFAD, 2016, p. 3). PvW also funded some support for technical innovations in irrigation in the early part of the review period (Table III.3).

The EKN's delegated budget provided no focused support for water management in agriculture until the launch of the Water Productivity project in 2016. Unlike MFA support for irrigation projects in some other countries, this ZVDA activity has a very small group of direct beneficiaries. Meanwhile, reflecting a decision to focus the limited budget on Beira and PLAMA, the plan of the 'delta team' for Mozambique, 2016-2017, made no reference to irrigation (Deltateam Mozambique, 2016).

Outside the direct scope of this evaluation, ORIO supported irrigation development in the Munda Munda river plain (an old rice production area), in a project aiming to upgrade and develop irrigation, drainage and flood control infrastructure over 5,000 ha, using water from the flood-prone Licungo river. Funds were released between 2010 and 2016: the total project budget was EUR 18.6 million, of which the ORIO subsidy contributed EUR 8.8 million. The plan was for participating farmers to own 90% of the shares in the operating company (RVO, 2017). But the project has been subject to major delays.

'During the wait, …uncertainty grew and little communication took place. The communities were growing impatient when the [2015 Licungo] floods hit… the impacts of recurrent floods have instilled government agencies and investors with an urgent need to place local irrigation schemes within the context of the wider Zambezi River Basin system so that the viability and risks of infrastructural investments can be properly assessed. It would be a definite blow to local producers if the new rehabilitation efforts are destroyed after only a few years.' (LANDac, nd, p. 4).

A Dutch-funded research project reported growing community impatience with the ORIO scheme, but pointed also to a broader concern with irrigation development in Mozambique: the protection of local people's land rights in the face of external 'land grab' pressures to acquire large areas for commercial purposes (Universiteit Utrecht and ActionAid, 2016; see also Veldwisch et al., 2013 and Otsuki, 2016).

Between 2011 and 2014, ORIO also provided pilot funding for the Envalor Emerging Farmers Project, a PPP that would include 1,294 ha of irrigation. ORIO was to contribute EUR 6.2 million out of a total budget of EUR 11.2 million. An evaluation of ORIO was critical of the funding model used for this pilot (Carnegie Consult, 2013a, pp. 151-154).

Dutch support for DNA, ARA-Sul, ARA-Zambeze and TWM arguably made some indirect and preliminary contributions to enhancements in water resource management that would benefit crop production. As shown above, some contributions were also made through centrally-funded activities, early PvW subsidies and commissions, and projects that focused on food security rather than water management. By the end of the review period, the new Water Productivity project was showing some preliminary, positive, small-scale results. Overall, a modestly positive answer can be given to EQ 7 in the box above, although such enhancements were not a focus of Dutch support to water resource management between 2006 and 2016.

By the same token, in answer to EQ 8, the Netherlands may be said to have made a modest contribution to enhanced agricultural productivity in Mozambique, although this did not result from a focused effort to improve agricultural water management. According to EKN informants, water productivity in Mozambican agriculture remains low, at 6,000 m^3 of water per tonne of maize produced – compared with 2,500 m^3 per tonne in some other countries, where production conditions may obviously be different. (One study cites the global average water footprint of maize as 1,222 m^3/tonne (Mekonnen and Hoekstra, 2010, p. 15).) Particularly through the links between ARA-Zambeze and ZVDA, it can be argued (as above) that strengthening of the ARA was laying foundations for enhanced agricultural water management and higher agricultural productivity.

EQs 9 and 10 concern institutional development for (agricultural) water users and are concerned mainly with the local level of WUAs and individual farmers. EQ 9 is addressed again in section 3.2.2 below. Much of the Dutch support to water management was institutional, but at the higher level of the DNA and ARAs. Indirectly, assistance to the latter was laying the foundations for enhanced operation and maintenance by users, by introducing water levies that irrigated farmers, among others, would pay – as in the case of ARA-Zambeze. According to informants, the ZVDA, whose work with 55 irrigated producers is supported by the Netherlands' new Water Productivity project, has secured funding from a World Bank Development Policy Operation to promote the formation of WUAs. However, this is not a direct result of Dutch assistance and lies mostly in the future.

Direct Netherlands engagement in these fields was so limited before 2016 that a positive answer cannot be given to EQs 9 and 10. There was new national legislation governing

irrigation associations in 2015, but this was not associated with Dutch support. Meanwhile, Mozambique was one of the African countries in which a research study found that

'all schemes were stuck in a cycle of government or donor infrastructure investment, running down of hardware, and demands for publicly funded renewal. Clarifying ownership and responsibility for maintenance of each piece of hardware is an essential reform for sustaining irrigation schemes. All of the schemes had problems with adequately maintaining infrastructure. For example, at the Khanimambo scheme in Mozambique, the flooding and breakdown of the pump meant that the irrigation scheme ceased operating until the INIR[14] replaced it. None of the schemes had saved sufficient funds for rapid repair of damage or replacement of equipment.' (Mwamakamba et al., 2017).

3.2.2 (Sub) national water management

The ToR pose a series of questions, shown in the box below, about water management planning and implementation. These are answered below with reference to the national level and the sub-national levels respectively. Some questions can be answered at both levels; some only at one.

EQ 11: In Mozambique, did Dutch support enhance the national and local institutional environment for and capacity of water users for participatory and transparent operation and maintenance (O&M) of water infrastructure?
EQ 12: Did Dutch support contribute to a strengthened policy framework for water management planning and implementation in Mozambique?
EQ 13: Did Dutch support contribute to the development of competent, adequately resourced, legally authorised and effective institutions for water management planning and implementation in Mozambique?
EQ 14: Did Dutch support promote the adoption by Mozambican water management institutions of the principles of IWRM, stakeholder participation, transparency, equity and environmental sustainability?
EQ 15: Did Dutch support promote the strategic and operational integration of water management, food security and economic development planning in Mozambique?
EQ 16: Did Dutch support contribute to approved water management plans in Mozambique?
EQ 17: Are any such approved water management plans being implemented in accordance with IWRM principles and enhancing water and food security?

It is worth recalling at the outset that, although this policy evaluation covers the 11 years from 2006 to 2016, the Netherlands provided little direct support to water resource management in Mozambique before 2012 – except in the field of TWM (section 3.2.3 below).

[14] National Institute for Irrigation.

Support at national level

The principal vehicle for Dutch support to institutional and policy development for water management at national level was **ASAS Phase V**. As noted above, this was the first in the long sequence of ASAS phases to include significant support for water resource management, in addition to the previous assistance to water supply and sanitation. Those earlier phases had seen the revision of Mozambique's 1995 **National Water Policy** (largely focused on water supply and sanitation) with a new version in 2007 that included specification of principles, approaches and targets for water resource management and was accompanied in 2007 by a National Water Resource Management Strategy (Global Water Partnership Southern Africa, 2013, p. 4). One key part of the policy framework, however, predates both versions of the water policy. The 1991 Water Law committed Mozambique to a basin approach to water management through local water authorities, with the first of these, ARA-Sul, established in 1993. Through its institutional support for ARA-Sul, ARA-Zambeze and (on a smaller scale) ARA-Centro during the review period, the Netherlands reinforced this fundamental principle of Mozambican water management policy.

ASAS V only made a modest direct contribution to the policy framework, however. One reason for this was that, in September 2014, it was placed in 'contingency' mode, restricting it to funding only the most urgent expenses and costs arising from contracts signed before that date (ACT-for-Performance BV, 2016, p. 9). The mid-term (and effectively final) review of ASAS V noted that the water policy needed to be updated (ACT-for-Performance BV, 2016, 2016, p. 24), but the project was not able to support this. However, it also found that

'integrated water resources management is the component where relatively the best results were attained. To respond to the problematic implementation of the Water Law, ASAS-V targeted a series of regulations and norms. Nine regulations and technical norms were elaborated and await governmental approval (one regulation has been approved). Substantial progress was made on another four regulations (studied, drafted and approved at CNAS[15] level).' (ACT-for-Performance BV, 2016, p. 26).

Furthermore, technical assistance to DNA/DNGRH through ASAS V lacked continuity, with the recent single full time Dutch staff member reportedly lacking clear briefing on any ongoing policy processes to pick up and support, and expected mainly to offer technical advice in multiple simultaneous directions. Only a modestly positive answer can therefore be given to EQ 12 in the box above. Other developments, combined with a lack of direct Dutch support in this field, limited the extent to which the policy framework for water management planning and implementation could be strengthened after 2007.

At the national level, **Dutch support for institutional development** specifically in the water management sector began, as noted, with the launch of ASAS V – and lasted only two years, effectively, until that project began to unravel. As shown in Table 3.1, only 36% of that project's budget was disbursed by the end of 2016, with most spending curtailed in 2014. At the heart of these institutional problems was the attempt to shift, in ASAS V, from the generalised operational support provided to the DNA under the previous four phases to a

[15] National Water and Sanitation Council.

more targeted, measurable work plan and performance assessment framework that could specify to all parties exactly what was being achieved in terms of outputs and outcomes. This was not well managed on either side. The new approach of ASAS V implied a major bureaucratic reform, and a transformation of working and reporting practice, in the DNA. A combination of reluctance and lack of capacity to achieve these changes was confronted by what many participants, in and outside the DNA, saw as too rigid an insistence by the EKN on adherence to the agreed protocols (ACT-for-Performance BV, 2016, p. 29) – although, as always, the EKN did consult with the Mozambican authorities on the design of Netherlands support, including objectives and performance indicators. In the poor salary environment, disagreements on how to manage a reduction in Dutch support for 'incentive' payments to DNA staff were among the issues that led to bad feeling on both sides. In ASAS V, as one Mozambican informant put it, 'the GOM and the Netherlands did not understand each other'. Such is the depth of long-term trust in the quality and commitment of Dutch support to the sector, however, that the same informant described ASAS V as 'just an accident in the relationship' and looked forward to further collaboration. Another Mozambican informant said:

'The Dutch gave themselves a difficult task by going for institutions rather than infrastructure. I admire them for this. But you need commitment from the other side, i.e. GOM. The Mozambique side is letting it all down at present. But the Dutch side has to understand the local context, be realistic, design interventions that will work.'

Against this background, an important effort was made through ASAS V to develop a strategic plan for the DNA, exploring ways in which it could break out of its inefficient status as a government department and possibly become an autonomous agency (analogous, perhaps, to the ARAs). The EKN funded a detailed, consultative planning process, but the GOM did not adopt its recommendations. It decided to keep the policy and oversight functions for water supply, sanitation and water resource management within the conventional ministerial structure of the national government, but to split the existing DNA. Early in 2015, the DNA was divided into the DNGRH (National Directorate of Water Resource Management) and the DNAAS (National Directorate of Water Supply and Sanitation). At the end of the review period, the capacity of the DNGRH remained low. All 'incentive' payments from the EKN had ceased, after failure to reach agreement on which priority posts would still receive them. Some posts were vacant. Salaries were unattractive. One informant estimated that the man washing cars in the parking lot could earn as much per day as a middle-ranking staff member in the Directorate. While recent graduates might be willing to seek experience in the DNGRH for a few years, it was hard to retain them for much longer. The prospects of assuring adequate capacity at the higher levels of the organisation were poor. Many other components of the Directorate's recurrent budget were inadequate too.

At the national level, it is therefore hard to give a positive answer to EQ 13 in the box above. Despite good intentions to find a better way forward, Dutch support did not contribute to the development of competent, adequately resourced, legally authorised and effective

institutions for water management planning and implementation at that level. As will be shown below, it made a more effective contribution at the sub-national level.

At the national level of the DNA/DNGRH, the Netherlands made more straightforward progress promoting appropriate environmental **principles in water management** than social and governance ones – although all these are aspects of IWRM (EQ 14 in the box above). All these principles were already endorsed in the National Water Policy of 1995 (GIZ, 2017), although that policy was largely focused on drinking water and sanitation, with its successor in 2007 adding the application of those principles to water resource management.

'Through its current water policy the country is committed to:
- *Decentralized, autonomous, and financially self sustaining provision of water supply and sanitation services.*
- *An increased role for the private sector.*
- *Integrated water resources management taking environmental impacts into account.*
- *Recognition of water as an economic, as well as a social, good.*
- *Multi-objective investment planning.*
- *Increased beneficiary participation.*
- *Water education at early ages.*
- *Integrate promotional activities in water supply, sanitation and hygiene.*
- *A greater focus on capacity building.'* (Gallego-Ayala & Juízo, nd, pp. 4-5).[16]

Continuing reinforcement of the environmental dimensions of IWRM was uncontroversial, linking as they do into the concept of basin planning and management that was endorsed in Mozambique by the water law of 1991. The country's distal position in numerous transboundary river basins emphasised the importance of IWRM from a catchment management perspective. At the national level, promotion of the principles of stakeholder participation, transparency and equity was a more political challenge, confronting fundamental issues of governance in Mozambican society. The review period saw increasing controversy around those issues, with the Netherlands among those members of the international community that expressed concern about the transparency and equity with which development assistance was administered. At the national level, therefore, Dutch support did not achieve much in promoting the social and governance dimensions of IWRM. Particularly during ASAS V, dialogue on policy broke down at this level.

'ASAS-V was a program dealing with important strategy and policy issues. However, program management hardly involved the political leadership of the sector. The policy dialogue took place at the technical level, in other words, program milestones were 'owned' by technicians, not by the decision makers (Minister and Ambassador)... The Government didn't systematically involve EKN, and other partners, in the dialogue concerning crucial reforms. The institutional reforms were introduced without preceding discussions with the sector partners and the water policy is also being updated without involvement of Mozambique's partners.' (ACT-for-Performance BV, 2016, p. 31).

[16] The undated version of this paper quoted here includes references to the 2007 National Water Policy.

Central funding from The Hague supported the work of the Water Integrity Network in Mozambique, among other countries. However, the effectiveness of this support (which covered water supply and sanitation as well as water resource management) is debatable (Table III.2) – and, according to informants, it was poorly co-ordinated with the EKN and its programmes.

Meanwhile, some stakeholders complain that the DNGRH does not give ARAs enough guidance about the implementation of IWRM, either technically or organisationally – and that national understanding of IWRM remains superficial. On the other hand, one reported reason for the split of the DNA and the establishment of the DNGRH was the growing conviction at the highest levels of the GOM about the importance of IWRM. The Ministry of Public Works and Housing, under which the DNA fell, is now the Ministry of Public Works, Housing and Water Resources. There was no direct Dutch influence on this decision; but the strategic plan for DNA that was formulated with ASAS support was reportedly used in design of the organograms of the two new Departments in the restructured Ministry.

By the same token, it is only in the most general sense that, at the national level, Dutch support can be said to have promoted the strategic and operational **integration of water management, food security and economic development planning** in Mozambique (EQ 15 in the box above). Having decentralised most aspects of water management to the ARAs, national government remained aware of and committed to such integration, for example in development planning for the Zambezi valley. But, as noted above, it gave little technical direction to these other agencies.

Support at sub-national level

During the second half of the overall review period, when the Netherlands was more directly supporting water management, it was influential in the development of the water management administration and implementation roles of the ARAs, which were first set out in the Water Law of 1991. This helped to create better opportunities for these more local water management institutions to promote the effective engagement of water users in the O&M of water infrastructure. As explained in section 3.2.1 above, this influence was so indirect and preliminary by 2016 that it is not possible to give a positive answer to EQ 9.

Part of the process was the establishment and support of Basin Management Committees (BMCs), which are meant to represent 'small and large water users, local governmental agencies and civil society organisations' (Evers, 2014, p. 3). While these should be a more effective local platform for water users to engage in the O&M of water infrastructure, Dutch support did not manage to strengthen them much. The assistance provided to ARA-Sul and ARA-Zambeze focused mainly on the (still enormous) tasks of building institutional capacity at that level. BMCs are still not really local: there is one for the Zambeze catchment that serves as a sort of consultative counterpart to ARA-Zambeze, meeting once or twice a year for information exchange, sensitisation and advocacy and comprising institutional users like mines, dams and irrigation schemes, as well as government agencies and NGOs – rather than being a fully representative structure for participatory management by smaller-scale users. BMCs, to the extent that they have developed at all in Mozambique, exhibit a

common phenomenon in the development of participatory management institutions. The bodies are created and representatives are chosen; but higher authorities then use them mainly to receive announcements and information, rather than to take on any meaningful management responsibility.

'...as stated by the interviewees, generally, most RBCs [River Basin Committees] were not truly independent and representative of users rather, they give the impression that they are used to legitimate government's agenda at local level. This weak participation is symptomatic in a country that is underdeveloped and most citizens cannot afford the cost of their participation in these forums. Interviewees went further agreeing that RBCs appeared to be designed to be yet dependent, guided and to react to the central and decentralized water institutions when needed.' (Inguane et al., 2013, p. 9).

Dutch advisers to ARAs have been aware of these issues; but Dutch support has been more than fully occupied with developing the still weak capacity of the ARAs, and could not make a direct contribution to strengthening user representation in water management. To answer EQ 13 in the box above, Dutch support to ARA-Sul, ARA-Centro (on a small scale) and (especially) ARA-Zambeze did contribute to the development of competent, adequately resourced, legally authorised and effective institutions for water management planning and implementation in Mozambique. **ARA-Sul**, the oldest of the country's five ARAs (established in 1993), was better resourced and received less support, although Dutch assistance in dyke rehabilitation and management systems was significant. Even ARA-Sul (which has four dams to manage and six basins to monitor) remains financially dependent on central government. Wetterskip Fryslân works with ARA-Sul. With MFA funding it was able to recruit external technical assistance to complement short-term inputs by the water authority's own staff. All water authorities provide only a few staff weeks a year to the ARAs they support, together with travel and subsistence costs.

As can be seen from Table 3.1, Dutch assistance to **ARA-Zambeze** was on a much larger scale. Like the support to ARA-Sul, it was facilitated by regular advisory inputs from a Dutch water authority, Waterschap De Dommel. However, the water authority provided a few weeks of short-term inputs by staff visiting from the Netherlands, while MFA funding provided full-time Dutch technical expertise. The main objective of MFA support to ARA-Zambeze was institutional development and capacity building (Salomon, 2017, p. i).

Important assistance has also been provided to ARA-Zambeze in technical and fiscal areas, for example groundwater analysis and development of a revenue plan – linked, of course, to the sensitive and complex issue of water user tariffs. Netherlands funding has also provided ARA-Zambeze with vehicles and equipment, as well as salaries for contract staff and capacity development for the organisation as a whole. Waterschap Hunze en Aa's provides support to ARA-Centro. All the Dutch water authorities engaged in Mozambique have now formed an 'Impuls' initiative to co-ordinate their support as well as all other external assistance to ARAs. Their constitutions allow them to devote a small percentage of their total budgets to international co-operation, which is complemented by the Netherlands Water Bank and, in some cases, by funding from the MFA and other sources, such as FDW and Nuffic.

The 2016 MTR of the MFA project supporting ARA-Zambeze found that progress had been generally good, with progress ahead of plan in terms of institutional capacity building. However, the lack of a logical framework and clear performance indicators for the project made evaluation difficult. The MTR also identified some improvements in operational water management by the organisation, including investments in the hydrometric network (Salomon, 2017, pp. ii-iii). This policy evaluation was repeatedly told in Mozambique that effective water resource management depends on adequate, accurate data – which remain a scarce commodity. For a combination of funding and administrative reasons, hydrological monitoring installations are in poor condition or are only irregularly checked, with data reporting and management equally incomplete and unreliable. As a result, according to informants, water management planning must still often refer back to data from the 1980s or earlier. The recent pilot activity funded by PvW, Mobiel water meten (Table III.3, Annex 3), carried out in association with ARA-Sul, encountered major difficulties in achieving regular hydrological readings by field staff, who are paid very poorly and whose motivation is correspondingly low. It is plainly very risky to depend on current hydrological data, which may not be based on actual readings. This remains a significant threat to the quality of all water management planning in Mozambique.

The principal technical inputs to ARA-Zambeze, as at ARA-Sul, come from **Dutch water authority** staff on short visits. As in other countries covered by this policy evaluation where this model has been used, questions arise as to the relevance and adaptability of the Dutch water authority model and of the staff who come to offer their services in Mozambique. As in those other countries, the findings are mixed. Dutch staff do prove to offer relevant expertise and to adapt to local conditions, although not always optimally. There have been instances where they added little value; and some informants point to the possibility that they compete with local consultants. In 2014, the EKN expressed dissatisfaction about the poor level of co-ordination of Dutch water authorities' engagement in Mozambique, and about the unprofessional or potentially counterproductive character of some of the initiatives these authorities had undertaken in the country. Furthermore, one informant pointed out a universal truth: experts are not necessarily trainers.

The Dutch concepts of water user fees to and representation in local water management authorities are applicable in Mozambique. But there should be no illusions about how much the political, social and economic environments in the two countries differ; how cautiously the Dutch model should therefore be applied in Mozambique; and how realistic expectations should be about the pace of ARAs' institutional and fiscal progress. Like ARA-Sul, ARA-Zambeze is not sustainable. Like all ARAs, its revenues depend on the health of the regional economy. Although it and ARA-Sul have a potentially strong revenue base because they serve some large water users (irrigation, municipalities and power generation), a recent economic slow-down meant that ARA-Zambeze's income was reduced and its development was slowed too.

Although the answer to EQ 13 can be positive – the Netherlands made a real contribution to some ARAs' development as water management institutions – it must be recognised that Dutch assistance only helped three of the country's five ARAs some steps along the long

road to adequate capacity and effective performance. In practice, meanwhile, more than quarter of a century after the ARA concept was introduced, it is still constrained by the centralising tendencies of Mozambique's political heritage. According to informants, ARAs are not really autonomous; they still need DNGRH approval at various levels. The intended ARA supervisory boards have not been established, sustaining central influence over their decisions and operations. ARAs are constrained, too, by the lack of capacity in DNGRH referred to above.

One informant noted that ARA-Zambeze struggles with a lack of nationally defined strategies and procedures, e.g. for licensing and water quality standards. Not getting help from Maputo, it has to request it from the Dutch water authority that works with it. An EKN visit to ARA-Zambeze in 2014 noted that central government had not yet approved the organisation's internal regulations (EKN, 2014, np). It had still not done so in 2016; nor had it issued a decree regarding an approved revision to bulk water tariffs.

'Creation of other equally important instruments for autonomous operation of ARA-Zambeze (regulations and legislation for levying for effluent discharge as well as for taxation of water for hydropower generation) ... were also delayed and there are no perspectives that this will happen within the duration of the programme' (Salomon, 2017, p. vii).

In addition to the ARAs, Dutch support was significant for one other sub-national water management authority in Mozambique: the city of Beira. This municipality's water management concerns focused on flood management rather than water use or catchment management. Dutch support, delivered mainly (during the review period) through PvW provided expertise for development of the Beira Master Plan (see below), without any specific focus on institutional development for the city authorities. Nevertheless, the planning process did strengthen the city's water management planning and implementation and capacity through the experience that officials gained, and the exposure they received to new management concepts, such as the proposed land development company.

At sub-national level, an answer to EQ 14 in the box above can be derived from the discussion just presented on Dutch support to ARAs. It largely mirrors the answer already offered at the national level. In general and especially environmental terms, the Netherlands was pushing at an open door in encouraging ARAs to adopt **IWRM principles**. As explained above, however, achieving genuine stakeholder participation was a greater challenge – which has not yet been overcome. Operating one step away from the formal structures of government, ARAs were easier places to promote the principles of equity and transparency, although informants suggest that these bodies remain vulnerable to a range of less transparent influences and practices.

EQ 15 asks whether Dutch support promoted the strategic and operational **integration of water management, food security and economic development planning** in Mozambique. Support to ARA-Sul provided some impetus for this integration, strengthening the organisation's ability to address the multiple challenges of catchment management, flood control and water supply to urban utilities in the most developed

region of the country. Support to ARA-Zambeze and ZVDA laid the foundations for similar integration in another economically important area, the Zambezi valley. Netherlands assistance stimulated collaboration between the two bodies, for example, in strategic water resource planning for the Zambezi basin. However, in 2014 the EKN observed that *'the partnership with [ZVDA] ... has not developed as expected. Relations are good, but it seems that both organizations are just too busy to follow-up previously expressed intentions'* (EKN, 2014, np). The Water Productivity project that started in 2016 is expected to strengthen the integration of water management and food security efforts in the area.

EQs 15 and 16 in the box above ask about the Dutch contribution to approved **water management plans** in Mozambique. According to the EKN's water sector results fiche for 2015, 'IWRM plans including water allocation and protection policies' had been completed for seven of the 13 major river basins in the country by that year (EKN, 2016, np). However, these plans, including that for the Pungwe river that reaches the sea at Beira, were not supported by the Netherlands. Dutch assistance focused on strategic planning for the two ARAs discussed above: ARA-Sul and ARA-Zambeze. It also helped these organisations to strengthen their data collection and management systems – which, as noted above, are a prerequisite for effective planning and remain largely inadequate in Mozambique.

As noted in section 3.1.6, the Netherlands did support a scoping study on integrated land and water management for improved flood mitigation in the lower Zambezi valley (De Sonneville et al., 2013). The study proposed, inter alia, a master plan for the Zambezi valley region. According to informants, the EKN subsequently appointed consultants to review the idea of an integrated plan. But, with reportedly inadequate TOR, this study did not lead to further action by the Netherlands. Meanwhile, section 3.1.6 also reported the lack of success of attempts in 2013 to promote Dutch delta approaches for the Limpopo basin. The Limpopo study and round table of that year had little influence on a subsequent flood management programme for the Limpopo basin that was funded by the World Bank.

The only water management plan to which Dutch support contributed directly during the review period was the **Beira Master Plan**. While this plan spanned more than just water management, flood control was its central concern, given the unsuitable location of much of the city in the swamps of the Pungwe estuary (where extensive low income housing areas are often inundated). The way in which the Netherlands supported the planning process is significant. While EKN support for the process reportedly fluctuated, the work was largely funded by PvW, with delegated MFA funding through the EKN only coming on stream for a BMP implementation project that started in 2016.

According to informants, following some initial studies in the 1990s, earlier Dutch-funded work on planning to tackle Beira's flood problems began in about 2001, but ran into problems related to political issues that persist today. The port, a major factor in Beira planning, management and economic growth, falls under the authority of central government. The municipality is a stronghold of one of Mozambique's opposition parties. At the start of the review period, the EKN had reportedly backed away from further engagement because of these political concerns. In about 2011, the idea was revived under

the auspices of the interministerial Water Mondiaal initiative (section 2.3 above), and a planning process was undertaken. The BMP was submitted in November 2013 and approved by the Municipal Assembly in March 2014. It was the flagship activity of the Netherlands' 'Delta Team' for Mozambique; as with the much larger planning exercise in Jakarta, it was co-ordinated by a 'management [regie] team', which included representatives of the MFA, the Ministry of Infrastructure and Environment, RVO and the EKN. A complementary planning initiative, also funded by PvW, proposed 'green infrastructure' measures for tackling storm water problems in Beira, focusing on the Chota area of the city (Deltares et al., 2015).

Some initial implementation of the BMP is already under way, with funding from various sources including the World Bank and KfW – now supplemented by the project funded through the EKN, 2016-2021 (Table 3.1). Overall, some 15 years elapsed from the first feasibility studies on urban land and water management in Beira to the completion of the BMP. Implementation is also proving complex and time consuming. But the Netherlands is committed to a 15-year period of support to planning and implementation in Beira. Among current challenges are arrangements to set up a land development company as a PPP (with the Dutch development bank FMO as a potential stakeholder) and make the necessary arrangements for extracting and depositing sand to build up low lying areas. As one informant put it, 'water in Beira is a matter of sand and land'. The ongoing challenge is to integrate the funding mechanisms and agencies on the Dutch side – in particular, the EKN and the RVO. The EKN has assigned its new project to the RVO for implementation, again underlining that the BMP is a different mode of development co-operation than most of the other activities covered by this evaluation in Mozambique. But in answer to EQ 17, it can be affirmed that implementation of this approved water management plan does conform to IWRM principles and is beginning to enhance water security for the citizens of Beira – for example, through improved drainage following the reopening of the Chiveve river channel, some initial resettlement of poor households out of drainage lines and the start of work on coastal anti-erosion measures.

3.2.3 Transboundary water management

EQ 19: In Mozambique, did Dutch support contribute to strengthened institutional arrangements and formal agreements over TWM, and did these take into account global norms for international water resources?
EQ 20: Did Dutch support in Mozambique contribute to a strengthened environment (political, institutional, infrastructure and O&M) for the implementation of TWM arrangements and agreements?
EQ 21: Did the governments of Mozambique and other countries allocate budgets and/or take measures for the sustained implementation of TWM arrangements and agreements to which Netherlands support contributed?
EQ 22: In Mozambique, did Dutch support for TWM enhance water safety and security?

As this report has already shown, TWM is one of the most prominent water management concerns for Mozambique. The periodic flooding catastrophes that its population suffers largely originate upstream beyond its borders. The Netherlands was supporting preliminary action on this long before the review period began, particularly for the Incomati-Maputo basin that is shared with Swaziland and South Africa. The three governments set up a Tripartite Permanent Technical Committee (TPTC) in 1983. Mozambique shares higher-level intergovernmental structures for other important transboundary rivers with the relevant riparian states: for example, the Limpopo Watercourse Commission (LIMCOM) for the Limpopo, and the larger Zambezi Watercourse Commission (ZAMCOM) for the Zambezi. It has signed an agreement with Zimbabwe for joint management of the Pungwe, and is negotiating with the same country over the Buzi.

Following earlier agreements and treaties in the 1990s that did not achieve effective TWM of the **Incompati-Maputo basin**, the three governments signed a Tripartite Interim Agreement for Co-operation on the Protection and Sustainable Utilisation of the Incomati and Maputo Watercourses (IIMA) in 2002. The TPTC then developed an Implementation Activity and Action Plan (IAAP) for implementation of the IIMA. The IAAP comprised 12 projects. Their implementation was meant to lead towards a formal, long-term agreement on the Incomati-Maputo basin between the three governments, and the establishment of an appropriate intergovernmental oversight body. In January 2007, Mozambique (on behalf of the three riparian states) signed an agreement with EKN for the Progressive Realisation of the Incomati-Maputo Agreement (PRIMA) project. Originally intended to run until 2010, extended with an additional budget of EUR 3 million to December 2011 and reportedly extended further into 2012, its objectives included preparation for the establishment of a shared watercourse institution (since the TPTC is only a technical committee); the implementation of six of the 12 IAAP projects; and preparation for a comprehensive agreement to replace the IIMA (DHV, 2013, p. 6).

According to informants, nine of the IAAP projects were ultimately completed by what is now described as PRIMA Phase I. To answer EQ 19 above, this support contributed to strengthened institutional arrangements and formal agreements over the TWM of the Incomati-Maputo basin, and to some extent strengthened the environment for the implementation of such arrangements and agreements. PRIMA I is considered by informants to have achieved solid technical outputs and to have improved trust between the three countries. (As Table 3.3 shows, no MTR or final evaluation was undertaken.) But progress was difficult and incomplete. There were international and domestic dimensions to this. Not surprisingly, the three governments and their respective local water management bodies (notably ARA-Sul and South Africa's Inkomati Catchment Management Agency and Komati Basin Water Authority) did not have identical perspectives on priorities and modalities. And, although they were increasingly ready to endorse the idea of a river basin organisation to manage the catchment, they were more resistant to the Dutch suggestion that a River and Environment Management Commission (REMCO) also be established as a collaborative forum for the various local water management authorities at operational level, linking to the strategic level of the RBO. There was also protracted uncertainty as to which country would be prepared to host the secretariat of the proposed RBO.

Meanwhile, the EKN also encountered numerous administrative difficulties in the administrative co-ordination of PRIMA I with the host agency, the DNA. The problems increased during lengthy interactions over the proposed PRIMA II, which was intended to carry the process forward to the formal establishment of the new RBO, with legal status endorsed by the three riparian states and executive powers for management of the basin. The EKN still had many questions over the DNA's administration of PRIMA I. The protracted and complex difficulties over PRIMA II led to irritation on both sides (the EKN and the three governments) about each other's attitudes. The EKN was frustrated that the three governments were apparently so slow to commit themselves to clear agreements on moving forward with PRIMA II and on the establishment of the RBO secretariat. The three governments (represented at working level by the DNA) felt that the EKN was too inflexible during these negotiations, and too insistent on the inclusion of a REMCO in the structure. By the end of the review period, new efforts were being made to prepare a revised proposal for PRIMA II, and there was fresh hope that the process would now move forward. Echoing the mood after the 'accident' of ASAS V, the (now) DNGRH still felt that the Dutch were the right partner to turn to in taking TWM of the Incomati-Maputo basin forward, because of their long history and acknowledged expertise in Mozambique water management.

PRIMA I, and the conceptualisation of PRIMA II, did incorporate the widely-accepted principles of IWRM, generally conformed to global norms for international water resources, and – to answer EQ 20 – made some progress to a strengthened environment for TWM. But by the end of the review period – in answer to EQ 21 – the riparian states had not allocated budgets and/or taken measures for the sustained implementation of TWM arrangements and agreements to which the Dutch support had contributed. Indeed, the governments' apparent reluctance to commit themselves to the long-term funding of an RBO was reportedly one of the principal causes of the EKN's frustration. Finally – to answer EQ 22 – enhanced TWM as a result of an ultimately successful PRIMA II, building on the foundation of PRIMA I, would undoubtedly enhance water security and water safety for Mozambicans affected by floods, as well as the population of Maputo whose water supplies reached dangerously low levels due to drought in 2016-2017. But this outcome had not been achieved by the end of the review period.

The **Environmental Flows** project was a significant TWM initiative that the Netherlands supported between 2010 and 2014. It focused on the Zambezi river, which is dammed for the generation of hydroelectricity in Zambia, Zimbabwe and Mozambique. When rivers are impounded, environmental (and social) challenges always arise downstream: the flows released may not be sufficient to support the ecology of the channel and riparian zone, particularly if previous flood regimes are not replicated by periodic releases from the dam(s). These factors may affect the livelihoods of those living downstream of major dams. The Environmental Flows project sought to work with the governments and dam operators in the three countries to raise awareness of this issue, enhance data collection, model downstream releases and exchange data. Given the general status of water stress in the Zambezi catchment, dam operators proved reluctant to contemplate major flood replication releases, potentially jeopardising their power generation; and the project's research revealed that such releases would in any case be insufficient to rehabilitate the

Salome River channel in the Zambezi delta. Nevertheless, the project is reported to have succeeded in stimulating substantive dialogue between dam operators and the three governments. In 2011, a Joint Operations Technical Committee was set up by the river authorities, dam operators and hydropower companies operating along the Zambezi in the three countries; and the governments signed a 'Memorandum of Understanding for Collaboration on Information and Data Exchange in the Management of the Catchment Areas of the Three Countries in the Zambezi Watercourse'.

As shown in section 3.1.2 above, 23% of the total delegated budget for Mozambique during the review period was committed to three phases of the regional **WaterNet** programme. This is characterised in Table 3.1 as an activity 'across water management themes' but can also be described as important support to TWM – as it was in the EKN's MASP for 2012-2015, which said that

''WaterNet'... has developed into a truly African institute... Through 'WaterNet' a variety of links and contacts are emerging, contributing to trans-boundary cooperation in water resources management.' (EKN, 2011, p. 13).

This country case study does not discuss WaterNet in detail because, as noted, it did not focus on Mozambique but worked across SADC from a headquarters in Harare, with formal designation as a SADC subsidiary institution (Enviroplan, 2015, p. ii). (It was originally run from Delft by UNESCO-IHE.) Focusing on promoting the adoption and implementation of IWRM principles across the region, WaterNet's initial emphasis was on the provision of graduate training. Later, it added short-course professional training, as well as supporting research and awareness raising on IWRM. It is generally regarded as having made an important contribution to professional and policy development in this field across the region, although the Phase III MTR quoted above not that it did not have specific performance indicators against which progress could be measured (Enviroplan, 2015, p. iii). According to informants, WaterNet graduates can be found in most of the relevant agencies in southern African governments – which, as the MASP argued, is an important foundation for effective TWM. An earlier evaluation was also positive.

'Overall, the WaterNet programme is doing extremely well in delivering on its mandate and objectives. The review team is satisfied that the mandate and objectives are still largely valid, and in line with the overall strategic direction of the SADC Water Sector and AMCOW. The programme is playing an extremely important role in southern Africa.' (Pegasys, 2011, p. 2).

However, it also noted the challenges of achieving financial sustainability for the programme (which is governed by a WaterNet Trust) and ending donor dependency. Sweden, the UK and Denmark have been among the programme's other donors, with the Netherlands now reportedly contributing about 70% of the total in Phase III (2012-2016), reducing to 30% for Phase IV (2017-2021). While the SADC Ministers of Water committed in 2015 to funding two WaterNet scholarships per country per year, these have not yet materialised.

The 2011 evaluation also pointed to the language problems affecting its training programmes: Mozambique was one of the member countries to which this particularly applied. At the same time, Mozambique is reported to have been in the forefront of most of WaterNet's collaborative research, e.g. a challenge programme on water and food in the Limpopo valley.

Overall, one informant summed up the WaterNet experience by saying that Netherlands support has achieved a good legacy in the SADC region. But this was only part of the MFA Mozambique portfolio for administrative reasons, as Maputo was the remaining embassy in the region with a development section that could administer it.

3.2.4 Cross-cutting issues

EQ 24: Were gender, environment, climate change and other priority Netherlands policy themes effectively mainstreamed in Netherlands-supported water management initiatives in Mozambique?
EQ 25: Did Netherlands-supported water management initiatives in Mozambique maintain or improve water management benefits for, and levels of management participation of, women and lower income groups?
EQ 26: Did implementation of Netherlands water management policy in Mozambique establish platforms for exchange of Dutch knowledge and skills and enhance the reputation, market profile and profitability of Dutch private sector engagement in the country?

Gender, environment, climate change and Dutch private sector engagement are the priority cross-cutting policy themes with which EQs 20, 21 and 22 of this study's evaluation matrix are concerned (see Annex 2 below and section 2.3 above).

Gender

Gender was not effectively mainstreamed in Netherlands-supported water management initiatives in Mozambique. The EKN's MASP for 2014-2017 identified 'weak implementation of gender strategies' as a risk, 'mainly caused by failure to identify gender-specific needs at operational level'. It said that the risk would be mitigated by 'encouraging systematic base line collection of gender disaggregated data as part of the projects' (EKN, 2013, p. 13). Whether collecting data can achieve effective mainstreaming is debatable. The EKN was not required to report on any gender indicator in its results fiche for the water sector (EKN, 2016). ASAS V supported the preparation of a gender strategy for the DNA, reported in 2016 as not yet approved. The ASAS V MTR raised 'the question whether these strategies are responding to a felt need and are really known to and owned by the decision makers' and said that 'there is no indication that [this strategy is] being implemented' (ACT-for-Performance BV, 2016, pp. 30, 12; EKN, 2016, np).

As the EKN's water management portfolio was reorientated towards field-level operations towards the end of the review period, greater opportunities emerged for more direct engagement at the interface between water management and gender issues. The 2016 evaluation of support through the EKN's food security sector to the ZVDA found that 'With the exception of Agency staffing, gender awareness and the purposive targeting of women farmers and entrepreneurs are not yet widely advanced' (Puetz et al., 2016, p. 63). According to informants, ZVDA is now considering preparation of a gender strategy and action plan. It is also believed that Dutch support in the Zambezi valley has helped some female agro business agents to be commercially successful, and that some women have improved their livelihoods by participating in small-scale irrigation initiatives assisted by the Netherlands. So far, however, such contributions to gender equality and the empowerment of women (GEEW) have been limited and localised. Beyond anticipating gender-specific enumeration of beneficiaries in progress reporting, the appraisal memorandum for the recently started Water Productivity project for small commercial farmers does not mention any GEEW commitment or component.

Environment and climate change

Environmental sustainability is central to the principles of IWRM that the Netherlands promoted throughout the review period in its support to improved water management in Mozambique. In many cases this was an implicit element of Dutch support, with the explicit focus being on institutional development. In some cases, however, the concern was more with controlling the environment – specifically, managing and reducing floods – than with promoting the sustainable use of water resources.

Climate change was clearly recognised as an important challenge for the country. It was mentioned as an important threat in the EKN's MASPs for 2012-2015, with the latter referring to its likely aggravation of Mozambique's existing flood risks (EKN, 2011, p. 19; EKN, 2013, p. 4). Appraisal memoranda for the project to implement the Beira Master Plan and for the Water Productivity project referred to it, as (more briefly) did those for PRIMA I and II. The appraisal memorandum for ASAS V did not mention climate change, however.

'Climate change will aggravate the increasing pressure on water resources and increase the risk of natural disasters, which may particularly have an impact on women. The challenge will be to prepare Mozambique's river basins for social and economic development, by making them safer and more resilient to the effects of climate change.' (EKN, 2013, p. 5).

Mozambican and Dutch concern about climate change was primarily driven by the flood risks that threaten so many of the country's citizens. PRIMA I supported the preparation of disaster management plans for the Incomati and Maputo basins, and the Beira Master Plan was motivated largely by concern about flood impacts on the city's livelihoods, infrastructure and economy. Clearly, these were adaptation rather than mitigation measures. Mozambique's economy and society are primarily victims, rather than agents, of climate change.

Support for lower income groups

Support for lower income groups was a central, but implicit commitment in Dutch assistance to improved water management in Mozambique, where 70% of the population were estimated to be living in 'multidimensional poverty' in 2015 (section 2.1 above). But because the bulk of that assistance was directed to institutional development, it did not directly benefit lower income groups. Efforts to adapt to climate change, as discussed above, had more direct potential to reduce the livelihood vulnerability of the poor majority of Mozambique's population. The most direct opportunity for benefits was created by the Beira Master Plan, whose implementation should relieve many low-income residents of that city from the flooding that has regularly afflicted them. But that benefit was not realised during the review period. It will also become necessary to take into account the longer-term risk of the land rights of the poor becoming vulnerable if their residential sites are no longer prone to flooding and land values in such areas rise. Modernisation of the cadastre for the city (currently out of date) will also be important to help secure the rights of the poor.

User participation is a core principle of the IWRM principles that Dutch assistance to Mozambique promoted. So much work was needed at higher levels of institutional development, however, that little progress was made in building direct user participation. As was shown in section 3.2.2 above, only limited progress was made with the Basin Management Committee system that, when fully developed, could serve as the main mechanism for user engagement in water management – which, in Mozambique, would mainly mean engagement by lower income groups.

Exchanging knowledge and skills and promoting the role and interests of the Dutch water sector

The implementation of Netherlands water management policy in Mozambique mainly promoted the exchange of Dutch knowledge and skills through the engagement of Dutch water authorities. The quality and effectiveness of that engagement were assessed in section 3.2.2 above. In earlier decades, a second major platform for Mozambican interaction with Dutch expertise was within the then DNA, where several technical assistance staff were posted. Under ASAS V, only one such expert remains in post. According to informants, his technical contributions and advisory support to Mozambican staff are much appreciated; but he is asked to help on so many different issues that his effectiveness is inevitably limited. Some additional exchange of technical ideas took place through central funding support to UNESCO-IHE, as shown in Table 3.2 and (in more detail) Table III.2.

The EKN's MASP for 2014-2017 committed it to 'focus its work both on Mozambique's promising economy and the opportunities that exist for Dutch firms as well as on the contribution that the Netherlands will continue to make to Mozambique achieving the MDGs and the developmental goals of the post 2015 agenda. By the end of 2017 it is envisaged that a considerable number of Dutch companies are firmly established in Mozambique… it is expected that Dutch companies will have been successful in winning tenders financed by [international financial institutions] and third parties' (EKN, 2013, pp. 1-2). Promoting the reputation, market profile and profitability of Dutch private sector engagement in the country was clearly an objective in the latter part of the review period.

By 2015, the MFA's results fiche for the water sector required the EKN to say 'what are the results of the transition to a more trade related relationship in the water sector?' (EKN, 2016, np). Its response was:

'The NL water sector is aware of the difficulties and risks involved in doing water related business in Mozambique. EKN employs all instruments available to NL development cooperation to reduce such risks where appropriate. The Dutch water sector aid may not translate directly into water business opportunities but more indirectly into business opportunities in ports and logistics or construction and engineering, related to Foreign Direct Investments in Mozambique. EKN pursues such opportunities in Beira where NL water sector supports the preparation of large infrastructure investments that create business opportunities in transportation, infrastructure, dredging and land development…

The cooperation with the City of Beira, produces interesting 'aid and trade' dynamics. The largest foreign investor in the city is Dutch port operator Cornelder. In its slipstream, other Dutch enterprises increasingly do business in Beira as well. They – among others – stand to benefit indirectly from the Dutch aid and trade policy implementation, which focuses on the improvement of the city's infrastructure, climate resilience, quality of housing, basic services delivery and land governance. The Dutch interventions explicitly target poor groups as well. This improves the enabling environment for private sector investment. A market survey in 2014 revealed very little appetite of (Dutch) private sector parties to invest in Beira. However, the engagement of FMO in 2015 in land development…, the elaboration of several business cases and the preparation of plans to enhance the transparency of land governance, rapidly changes this picture. Under the political leadership of the Mayor of Beira the prospects for collaborative multi-stakeholder and multi-donor efforts have improved substantially. A sustained effort in the coming years is expected to produce dividends for both citizens of Beira and investors.' (EKN, 2016, np).

Two informants specifically referred to the EKN's stronger emphasis on trade and commercial development for the Mozambican and Dutch private sectors towards the end of the review period, after some years of reported caution about moving beyond its established development assistance remit. The lengthy quotation above reflects that emphasis. One informant said 'this used to be a development Embassy'. The other said that 'the Netherlands used to do aid. Now, things have been changing'. However, the limited Dutch commercial appetite, further curtailed by Mozambique's fiscal crisis at the end of the review period, is recognised. Ambitions are limited.

The Mozambican Water Platform (PLAMA) was established with Dutch support (from ASAS, via DNA) in 2013. Its objectives were, inter alia, to provide business and policy support to its members and associates, and to stimulate interaction between the various public and private stakeholders in the sector (Water Mondiaal Mozambique, 2013, p. 4). At the same time, it was intended to serve as a nexus of collaboration between the Dutch and Mozambican water sectors. Resulting from the signature of an MOU between the two governments, PLAMA has been described as 'the Mozambique equivalent of NWP… a strong Mozambican water sector, in which at the moment only a few Dutch organisations are active, will give better opportunities for partnerships with Dutch organisations' (TRAIDWheel, 2017). Its expansion to date has been modest: membership is still limited to Maputo, and progress has been easier in drinking water supply than in water resource

management. Nevertheless, the platform achieved useful results in networking for the sector, notably through the conference that it hosted in 2015, and in the inevitably gradual process of building trust among the various stakeholders. Future funding and sustainability were uncertain at the end of the review period. PLAMA faced the challenge of becoming a truly national organisation and of assuring its financial viability.

As has been noted, the Netherlands was active in the water resource management sector only for the second half of the review period. This would, in any circumstances, be a short time in which to achieve a significant enhancement of the Dutch private sector's reputation, market profile and profitability (EQ 26). The opportunities to do this were further reduced by the factors reducing Dutch commercial appetite (see above), and by the focus of the Netherlands portfolio on institutional development, where it was the Dutch water authorities rather than the private sector that made some contribution. Preparation of the Beira Master Plan created the most promising opportunities for the Dutch private sector, although (outside the provision of consultancy services) these lay mostly in the future implementation phase – complementing the established role of the Dutch firm Cornelder, which runs Beira port. The Partners for Water facility, which might in theory have stimulated profitable commercial engagement through small-scale funding for pilots and innovative market development, was mainly used to commission consultancy inputs for the BMP.

3.3 Efficiency

EQ 27: Was the Netherlands able to fulfil its role as expert, broker and diplomat in enhancing collaboration between concerned actors within the Dutch government, the Netherlands water sector and Mozambique, and enhance complementarity and synergy of activities?
EQ 28: Did the involvement of the Dutch water sector in Mozambique lead to information, knowledge and technologies that are relevant and useable in the Mozambique water sector?
EQ 29: Did the involvement of the Dutch water sector in Mozambique strengthen the commitment and activities of other donors, policy-making structures and/or implementing agencies in the Mozambique water sector?

As in sections 3.1 and 3.2 above, this discussion of efficiency seeks to answer the specific EQs on the subject that were posed by the ToR (see boxes and Annex 2 below). With the available data and resources, it is not possible to attempt a full empirical analysis of efficiency in terms of costs and benefits, either in the conventional sense of the cost-effectiveness of outputs or in the broader sense of analysing efficiency at any or all of the levels in the logic chain (section 3.3.2). However, it is hoped that the discussion below in response to the ToR EQs on various aspects of efficiency will be useful.

3.3.1 The Dutch profile and role in Mozambique

As noted above, the reputation of the Netherlands as source of expertise and trusted advice in water resource management remained strong at the end of the review period. This was despite a period of difficult relationships with DNA/DNGRH around ASAS V and PRIMA in which the EKN lost trust with its GOM counterpart, and the latter found the EKN an inflexible and insensitive negotiating partner. The Netherlands' role as 'broker and diplomat' (EQ 27) was thus uneven – although the political and governance challenges of Mozambique in recent years would have been a severe test for the most skilful diplomat.

Opportunities for the Netherlands to fulfil its role as expert were limited by the focus of the portfolio on institutional development and the reduction in the numbers of Dutch technical assistance staff compared with earlier decades. Nevertheless, in the latter part of the review period Dutch expertise was constructively deployed in DRR missions and in the Beira Master Plan process, with limited inputs also through some of the early PvW activities (Table III.3). The contribution of Dutch water authorities in this regard was significant but not of uniformly high quality, as discussed above (section 3.2.2).

The EKN tried, in the second half of the review period, to slim down the portfolio of activities that the Netherlands was supporting in the Mozambique water sector: one informant said that it had previously resembled 'a Christmas tree'. Whether this enhanced complementarity and synergy is debatable. Simultaneous support to central government (ASAS V) and to regional water authorities (ARA-Zambeze and ARA-Sul) can be seen as an appropriate balance, given the low return on investments at the centre and the justifiable wish to work at a level closer to local water users. At the end of the review period, this balance was redefined, as the EKN sought to reduce its commitment to 'soft' institutional development work and increase support directly at the field level: initially, through the Water Productivity project. It would be premature to say that an ideal blend of modalities and levels of intervention has been achieved. That task has been made more complex by the recent policy requirement to intensify the involvement of the Dutch water sector.

In a general sense, the involvement of the Dutch water sector in Mozambique did lead to information, knowledge and technologies that are relevant and useable in the Mozambique water sector (EQ 28 in the box above). The transfer of these commodities was limited by the portfolio focus on institutional development; by the limited amount of direct technical assistance input provided (the Dutch water authorities only posted staff for a few weeks at a time in Mozambique); and by the uneven technical quality of what was provided (section 3.2.2; Table III.2; Table III.3). Some of the innovative technologies introduced did prove successful; and the city of Beira has relied heavily on Dutch expertise in exploring technical and funding mechanisms for enhancing flood resilience (as well as port development). At a more general level, the Netherlands continued to make important contributions of ideas and approaches by promoting institutional development for TWM and by helping to build the ARAs as a key water management institution.

The involvement of the Dutch water sector in Mozambique did not significantly strengthen the commitment and activities of other donors in the water resource management field (EQ 29). There was strong collaboration between the Netherlands and the World Bank (for example on flood management), but also misunderstandings around their respective roles in support for strategic planning and institutional development for the Zambezi valley. Late in the review period, Korea joined the Netherlands as co-chairs of a new water resource management donor group, with the Japan International Co-operation Agency (JICA) also participating. But it cannot be argued that any of these other agencies strengthened their commitment and activities because of the involvement of the Dutch water sector. Korea has posted a number of staff in DNGRH to work on a master plan for the sector, although none of them has a continuous presence like the one Dutch expert there, and collaboration between the Netherlands and this large-scale Korean intervention is not intensive.

3.3.2 Costs and benefits

EQ 30: What do available data show with regard to the cost per beneficiary and per unit of production benefit of Netherlands-supported water productivity activities in Mozambique?
EQ 31: What do available data show with regard to the cost and duration of achieving key water management planning support results, compared to the cost and schedules specified in the design of these interventions?

No empirical data are available on the costs and benefits per beneficiary and per unit of production of Netherlands-supported water productivity activities in Mozambique (EQ 30 in the box below). This partly reflects the portfolio focus on institutional development, limiting the scope for empirical analysis of units of benefit per unit of cost. This problem was compounded by generally poor monitoring and reporting of project results. It is to be hoped that monitoring of the new Water Productivity project will yield data that support more rigorous analysis of costs and benefits. The project has launched a detailed data collection programme, although, according to informants, expertise for this had to be obtained from Peru after it proved difficult to get it from Dutch sources.

These limitations make it equally difficult to answer EQ 31, about performance against budget and schedule. The MTR of ASAS V reported that 'In the absence of an expenditure planning and unit costs, it is impossible to formulate a grounded opinion on the efficiency and effectiveness of the ASAS-V program. However, it is clear that efficiency and effectiveness doesn't drive the work of the planning and financial departments of DNAAS and DNGRH'. The only other MTR in the Mozambique portfolio under review, of support to ARA-Zambeze (there were no evaluations – Table 3.3) also pointed to the lack of a results-based approach and a structured operational plan for the organisation and did not attempt any empirical analysis of efficiency (Salomon, 2017, pp. v, vii).

Two clearly inefficient experiences in the portfolio were the curtailment of ASAS V, with only about a third of the budget used by the end of 2016; and the long delay in negotiating further TWM work for the Incomati and Maputo basins. Although the Beira Master Plan process was protracted and – in the view of some informants – took far longer than necessary to reach fruition – the actual project for preparation of the BMP appears to have been performed within budget and schedule in 2013. However, PvW data are not amenable to analysis of value for money, and the use of multiple PvW grants for activities like the BMP would inevitably complicate any such analysis. The global evaluation of PvW 3 does not attempt it (te Riele et al., 2016).

4 Main findings

The main findings presented below offer an overall assessment of the quality of design and implementation over the review period. For this purpose, it is helpful to test the accuracy of the assumptions made in the implicit theory of change that underlay Dutch support for water management in Mozambique (Figure 1.1). These main findings thus answer EQs 11, 18, 23 and 32 in the evaluation matrix (Annex 2).

4.1 Dutch assistance to water management in Mozambique: challenges and contribution

It is worth recalling at the outset that, whereas this evaluation's other three country case studies (Bangladesh, Indonesia and Mali) could assess support to water resource management over the full review period of 11 years, this Mozambique study must mainly focus on the period from 2012: roughly half of the total. This is because, in earlier years, the Netherlands committed most of its water sector support to drinking water and sanitation, helping to tackle the enormous poverty challenges faced by the Mozambican population. The only exception was the commitment throughout the review period to support TWM.

It is notable, too, that the portfolio of activities funded through the EKN's delegated budget contains two partial anomalies. First, one of the largest commitments through the EKN was to three phases of WaterNet, which was a SADC-wide activity with no particular Mozambique focus. Secondly, the Policy Support Fund was handled administratively through the water sector of the EKN, but was also used in various other thematic areas. Neither of these activities, therefore, received focused review in this country case study. Subtracting their budgets makes the water management portfolio that was reviewed significantly smaller.

Another significant feature of the Mozambique case study is the strong emphasis on what had, in earlier years, been sector budget support (mainly for drinking water and sanitation) and which, from 2012, evolved into what the evaluation of ASAS V termed 'programmatic' support (with more water resource management activities now added). Although the modality was adjusted for ASAS V, and soon had to be adjusted further to 'contingency mode' as the administrative and funding relationship between the EKN and DNA broke down, the emphasis on working with and through government systems was largely retained – arguably a necessity in Mozambique's strongly centralised political structure. Related to this emphasis was the focus on institutional development, at the centre and in the regional ARAs – making this the 'softest' of the four country portfolios on which this evaluation has focused, and consequently the one for which fewest empirical performance data are available.

These key features of the Mozambique experience link to another, held in common with Bangladesh and Mali but not with Indonesia. This is the weakness of (central) government institutions responsible for water resource management, despite decades of Dutch involvement with the sector. It can be argued that, in the case of Mozambique, most of that involvement concerned drinking water and sanitation rather than water resource

management. But those decades of effort could, in different circumstances, have been expected to lead to a DNA that was generally stronger, better structured and more effective than was actually the case at the end of the review period. It would be possible, but not constructive or realistic, to argue that if Dutch support had been better designed and delivered over the decades, that stronger result could have been achieved. In fact, such an argument would be politically and institutionally naïve. The key finding from this country study, as from Bangladesh and Mali, must be that the success of institutional development in such cases depends on internal, domestic factors rather than external assistance. The Netherlands might have accelerated or facilitated an institutional development process that had appropriate drivers in the governance and politics of the nation. In the absence of such drivers, it could not succeed.

Without putting this conclusion in such bleak terms, the EKN did reach and recognise it, in stages. It endorsed the role of the regional ARAs as more effective (and potentially more participatory) agencies for water resource management, and supported the development of two of them. Towards the end of the period, still seeking the potential for more direct and tangible development results, it moved back closer to field implementation with the launch of the Water Productivity project and funding for implementation of the Beira Master Plan. Meanwhile, despite the 'contingency' mode, some support to the (now) DNGRH in central government continued, and relations between that body and the EKN had improved by the end of the review period.

As in Bangladesh and Mali, this experience in Mozambique leads to an unsatisfactory but necessary conclusion. In the water resource management sector (and probably many others), donors' institutional development support for the centre is unlikely to succeed, or even to achieve more than partially adequate results. More satisfactory performance can be achieved closer to the field, in regional and local water management structures and with water users themselves – even if sustainability and replicability at those levels cannot be fully assured. But some support to the centre remains necessary: partly to assure an adequately enabling environment for the more local work, and partly to sustain sufficient institutional and policy collaboration between the Netherlands and the host government. It is not satisfactory to work on a task that cannot fully succeed. But it is necessary for any attempt at better success elsewhere.

As in other countries, the Netherlands broadened its modalities for support to water resource management in Mozambique during the review period. As in other countries, this strategy achieved some success and encountered significant challenges. Dutch water authorities strengthened their contribution, which was generally but not always appreciated, relevant and modestly effective within the very different working conditions of Mozambique – and remained on a relatively small scale. Other instruments and modalities became available, with most use made of Partners for Water. Water Mondiaal and the concept of Dutch engagement with 'delta countries' became a significant part of the Dutch support framework. As elsewhere, the additional modalities proved most relevant when they could be focused on specific, significant initiatives. In the case of Mozambique, this was the Beira Master Plan, which – after a painfully slow gestation – finally emerged as an

efficient and promising planning process in 2013, supported by multiple PvW commissions and guided by a management ('regie') team within the overall framework of the Dutch 'delta team' for Mozambique.

All these initiatives and commitments were overshadowed by the deteriorating environment for development co-operation with Mozambique, as the Netherlands and other donors withdrew from budget support modalities in response to the country's governance challenges, and tightened other modalities in an attempt to enforce adequate administrative and fiscal standards. The Netherlands has a long history of support for the still desperately poor population of Mozambique, and appears willing to maintain that support, in water management and other sectors, where this is politically feasible and appropriate. But – combined with budget pressures at home – this meant that the Dutch contribution was modest.

4.2 Effectiveness

The main findings on effectiveness flow from the overview of challenges and contribution just presented above. They refer to the theory of change assumptions outlined in section 1.3.3 above. Again it should first be noted that, with the exception of support to TWM, most of the portfolio under review has been developed since 2012. In the water resource management sector, that is a relatively short time in which to achieve effectiveness, even in the most conducive circumstances.

It was also noted above that assessing the effectiveness of institutional development is never easy. It is particularly difficult when, as in Mozambique, clear performance indicators for institutional development were not adequately specified or reported. This country case study found that, at the national level, the effectiveness of institutional development efforts for national water management planning – primarily through ASAS V – was limited. The MTR of ASAS V was generous in concluding that water management was the field of ASAS effort where the best results had been attained by 2015 (ACT-for-Performance BV, 2016, p. 26). Although incremental progress was indeed achieved, DNGRH – the apex institution for water management in Mozambique – remained weak at the end of the review period. As explained above, this was no surprise, given the context in the country. ToC assumption 4 (section 1.3.3) says that it is socially and institutionally feasible to achieve significant improvements in the quality (including the transparency) of Mozambican water management institutions. This assumption proved incorrect at national level. So did ToC assumption 13: 'a basic assumption made in all bilateral and multilateral development co-operation is that the various parties' own assumptions about due process and sound governance in the relationship will remain valid.'

At the sub national level, assumption 4 proved somewhat more valid, although the continuing strong controls on ARAs from the centre were a constraint. The effectiveness of institutional development for the ARAs was more convincing, but remained partial: ARA-Sul and ARA-Zambeze still have a long road to travel before they are sustainable and adequately

capacitated, and they are the two strongest sub national water management agencies in the country. Meanwhile, only very limited institutional development progress was made at what is arguably the most important level of water management: that of the users themselves, supposedly to be built through Basin Management Committees. ToC assumption 11, that water users contribute significantly to the management and maintenance of water infrastructure, could hardly be tested on the basis of activities that the Netherlands supported.

TWM is partly an institutional development challenge, and partly a planning and implementation process, with the latter two contingent on the first. Most of the TWM effort supported by the Netherlands during the review period, through PRIMA I for the Incomati and Maputo basins, remained at the stage of institutional development, promoting a shared understanding between the relevant authorities in the three countries and coaxing them towards agreement on a stronger institutional framework for the governance of the intended planning and implementation. Progress was frustratingly slow. Effectiveness was only partial, partly because of the institutional weaknesses in the DNA/DNGRH that were discussed above. ToC assumption 8, that regional co-operation was politically and institutionally feasible, proved weak in this case.

At all these levels and in all the sub-sectors just discussed, it is therefore necessary to conclude that ToC assumption 5 was weak too. There was inadequate political will for Netherlands-supported policy and institutional initiatives to be converted into meaningful action. Although government resources would always have been a constraint, more could have been done to build on the Dutch support, even within the relatively short period since 2012, than actually occurred.

The decision to give more emphasis in the portfolio to field-level implementation was therefore appropriate, although it came too late for any signs of effectiveness to appear in this review period. The new (and only) activity in this evaluation's 'water management in agriculture' category will only reach a small number of direct beneficiaries, but opens the way for a potential new field of results.

Overall, it is premature to assess the accuracy of ToC assumption 3, that plans lead to meaningful, effective action. However, subject as always to the potential for political obstacles, the prospects of this proving true are reasonably strong in the case of the Beira Master Plan. Preparation of the BMP (largely funded by PvW) did endorse assumption 1: that Dutch expertise can add value and fill gaps in locally available knowledge and expertise. More broadly, as discussed above, the support provided by Dutch water authorities also confirmed this assumption, despite some weaknesses and the relatively small scale of these inputs. Building partly on the legacy of decades of Netherlands assistance to the Mozambique water sector (mainly in drinking water and sanitation), water management support in this review period did strengthen the Dutch reputation for competent and valuable technical advice. Endorsement of ToC assumption 2, that Dutch and Mozambican expertise can be complementary and synergetic, must be partial. In most cases, Dutch expertise performed roles for which no local and qualified personnel were available, or was committed to developing capacity rather than working alongside it.

Because so much of the Dutch effort under review in Mozambique concerned institutional development, there is only thin evidence with which to test ToC assumptions 6 and 7, about the relevance and practicality of the water management techniques and methods that the Netherlands promoted. In general, this was broadly true: Dutch expertise in a range of IWRM approaches and techniques proved useful, and the land development company idea for Beira shows promise. Measurement devices provided by the Dutch-funded SADC HYCOS II project, on the other hand, were too sophisticated (Table 3.2). In the TWM field, the Environmental Flows work supported for the Zambezi basin proved technically as well as institutionally valuable. Dutch water management expertise was well displayed in the BMP process, although this was at the stage of preparatory investigations and planning rather than (so far) implementation.

Through the BMP, the Netherlands was also able to demonstrate the potential contribution of the Dutch private sector to water management in Mozambique. This was primarily in the field of consultancy services for planning purposes. Complemented by other inputs from the Dutch water sector – notably Dutch water authorities' work with ARAs – the private sector was able to demonstrate its capacity, in the words of ToC assumption 9, to make relevant contributions in Mozambique. But the potential of the Dutch private sector to be effective in achieving the objectives of water management interventions was constrained by the difficult working environment and limited commercial opportunities in the country. The consequent lack of appetite was compounded by the fiscal and governance crisis at the end of the review period.

With limited time and limited scope for effectiveness over five turbulent years in Mozambique's difficult development (with the exception of the more extended TWM work), the water management portfolio under review here achieved only modest results. Important lessons were learned: an attempt was made to summarise the key ones in section 4.1 above. Useful foundations were laid for potentially greater effectiveness in some aspects of Mozambican water management. Achieving that greater success will, as ever, be contingent on local political, governance and institutional conditions.

4.3 Efficiency

As in Dutch-supported water management programming elsewhere, the monitoring data collected and reported were wholly inadequate for the empirical analysis of efficiency. In organisational and management terms, it is possible to offer some qualitative findings.

The analysis of efficiency is bound to be difficult when it is applied to institutional development efforts. Even if clear performance indicators are set, monitored and reported, it is extremely difficult to identify exactly what the costs per unit of performance were, at either output or outcome level. For this Mozambique water portfolio with its strong institutional development emphasis, therefore, the comments must be more than usually qualitative.

From the EKN's point of view, the reduction in the number of projects in the water sector overall (trimming the 'Christmas tree' to which one informant referred) brought some improvement in the organisational efficiency of the portfolio. Set against this was the increase in the number of facilities and instruments, within and beyond the MFA, that the Netherlands began to deploy in support to water management. As in other countries, the EKN also sought, with only partial success, to track and co-ordinate with the various initiatives supported by central funding from MFA in The Hague. This growing complexity was not conducive to efficient management of the Netherlands' profile and portfolio as a whole. In the case of Mozambique, however, the co-ordination problems do not appear to have been serious. It would be an exaggeration to say, in the words of ToC assumption 10, that the overall suite of methods and tools were relevant, complementary, effective and efficient. But this assumption was closer to the truth in Mozambique than in some other countries. There were, after all, rather fewer activities across this suite of budgets and instruments in the Mozambique case. The 'delta team' for Mozambique was able to achieve a smooth joint management system. As elsewhere, the biggest challenge to efficiency, from the EKN perspective, was keeping track of activities funded centrally by the MFA.

At a different level, the efficient management of the portfolio was constrained by the complexities of interacting with the DNA/DNGRH. In this, the Netherlands shared a challenge with other donors in Mozambique and elsewhere: how to manage the discrepancy between its own standards of administrative governance and those it encountered in the GOM. How strict and harsh should the donor be in confronting irregular accounts, missing paperwork and even invoices for missing outputs? This is a kind of diplomacy for which embassies may not be optimally prepared. In the water management portfolio under review here, efficient management of some of the most important activities with the GOM proved impossible, with relations between the EKN and the DNA becoming strained at some stages. Conventional definitions of efficiency and best administrative practice become inadequate in such cases. It is unfair to say that efficient performance of the planned activities suffered because the EKN insisted too strictly on proper standards of administrative management. It would be unacceptable to say that those standards should be relaxed so that some sort of implementation can continue. But it is true to say that implementation suffered because the two sides' perceptions of acceptable, efficient administrative performance did not match. Some informants believe that the EKN was not subtle and smart enough in its management of this issue. What is clear, as already argued in section 4.1, is that implementation of the water management portfolio was inevitably sub optimal because of the political and governance environment in which it was being attempted.

This is a policy evaluation, and it is important to conclude these remarks on efficiency from a policy perspective – which links to the evaluation perspective. The conventional aid policy cycle of projects with design documents, targets, MTRs and final evaluations was far from completely followed. But at least it provided scope, in theory, for an empirical and evidence-based assessment of performance and the reasons for it. The more recent interministerial system that has begun to replace those conventional arrangements in Mozambique is more adaptive, flexible and organic – and less systematically reported or assessed.

5

Recommendations

The primary purpose of this country study is to support IOB's overall evaluation of Dutch aid policy for improved water management – not to make comprehensive or authoritative recommendations about the development of support to water management in Mozambique. However, drawing on the contextual analysis, findings and conclusions set out above, some suggestions can be made about how to shape that support in the years ahead. They are not all totally new. In some cases, they are partly endorsements of existing trends in the MFA's thinking.

Policy effectiveness

1) Deliver most of the support in the regions and the field, but maintain engagement with the centre.

This recommendation represents a necessary compromise. This study has shown the low returns on past heavy investment in institutional development for water resource management at national government level. It has endorsed the MFA's increasing emphasis on institutional development at the regional level of the ARAs, and on achieving tangible, practical results through engagement at field level, for example in the new Water Productivity project and in implementation of the Beira Master Plan. But it has also argued that it would be wrong to abandon all support to the DNGRH. A further, tightly structured, carefully monitored and rigorously managed phase of ASAS support there is appropriate, while recognising that the major drive for sustainable institutional development, allied to meaningful governance reform, must come from the GOM itself. The mechanism of a fund manager, already used by DFID and under consideration by the EKN, is a promising way of maintaining GOM authority over expenditure decisions while controlling disbursements through external channels.

2) Ensure an effective balance between administrative rigour and constructive collaboration.

This recommendation is made because, at some stages of the relationship between the EKN and the DNA/DNGRH during the review period, the quality of the interaction deteriorated significantly. While it could be argued that such a deterioration was inevitable and necessary, given the problems being encountered in the GOM, it is also worth considering that there is more than one way to approach such problems. Those responsible on the Dutch side should take great care to present their concerns and requirements in a way that makes space for the GOM to respond in a constructive and feasible manner.

3) Maintain support for transboundary water management

Some of the MFA's difficulties at central level with the DNA/DNGRH have related to the painfully slow progress of PRIMA. Nevertheless, if acceptable institutional and administrative arrangements can be agreed, it is important to continue (and, if resources permit, to expand) Dutch support for TWM. This is because so many among Mozambique's poor rural population – and indeed the urban water consumers of Maputo – can benefit from more effective TWM. The guiding principle for such Dutch support must be to expedite practical action and minimise the wastage of time and money on excessively formal bureaucratic structures and procedures.

4) Balance support for institutional development and for practical implementation.

The bulk of the MFA's contribution should be assigned, in roughly equal proportions, to institutional development at the level of TWM, ARAs and BMCs, and to the practical implementation of improved water management measures. The scale of that practical implementation will be modest. But it should be designed, implemented and reported in a way that demonstrates the contributions it makes to the livelihoods of the target populations, and that enables lessons to be learned for the GOM and other agencies to apply at a larger scale. Extension of support to additional ARAs – inevitably, a long-term challenge – is appropriate as long as it does not dilute Dutch assistance in ways that reduce its effectiveness at this level. An important component of that support should be for enhancement of water user fee collection.

5) Implement the International Water Ambition in a realistic and balanced way.

The IWA makes it clear that it does not replace existing Dutch policy. Nevertheless, as a recent integration of activities and statement of vision across three ministries, it currently has some prominence, with its focus of the comprehensive delta approach on 'urban deltas', as a recent complement to existing policy. In Mozambique, the MFA and its partner ministries should recognise the limited scope for the application of the IWA, however vital some of its IWRM principles are for the sustainable development of coastal cities like Maputo and Beira. The opportunities for broader engagement by the Dutch water sector are limited in the short to mid term. The focus of Dutch support needs to remain on the more conventional aspects of institutional development and field implementation, balanced by implementation of the Beira Master Plan as the principal expression of the IWA. Additionally, enhanced TWM of the Incomati and Maputo basins could be the basis for IWA activities to make Maputo's water supply more adequate and reliable, potentially involving additional support to ARA-Sul.

6) Support upgrades to hydrological and related monitoring.

Through support to ARAs and DNGRH, the Netherlands should target some of its practical implementation support to ensure that accurate hydrological data are collected, reported and used in water management planning and implementation. In addition to hydrological data, it should help ARAs to strengthen their data collection on water use and water users (see recommendation 4).

7) Build and capitalise on the Netherlands' profile as 'trusted adviser'.

Despite the difficulties that arose at some stages in the Netherlands' relationship with the Mozambican authorities, the Dutch profile as an expert and trusted adviser on water management is largely intact at the end of the review period. The design and delivery of Dutch support should aim to maintain this status: not only by ensuring the highest quality of technical expertise, but also by qualifying commercial ambition with a primary, impartial commitment to the sustainable management of Mozambique's water resources. Such a stance can help to maintain Dutch engagement, even as development assistance is complemented by more commercial relationships in which the Netherlands will inevitably be at a price disadvantage. TWM also offers important opportunities for performance of the 'trusted adviser' role. So does a proactive stance by the Netherlands in donor co-ordination in the water resource management sector.

Policy efficiency

8) Enhance co-ordination and quality control across the contributions of Dutch water authorities.
This study finds that Dutch water authorities made useful, if modest, technical and institutional contributions to improved water management in Mozambique during the review period. It also heard reports that this support was sometimes fragmented and not always of optimal technical relevance to local conditions. This is not surprising given the relatively small scale of the contributions (with no full time technical assistance) and the inexperience of some water authority staff in Mozambican conditions. The proposed IMPULSE initiative of the water authorities should work to ensure that advisers visiting from the Dutch water authorities are optimally orientated and that their inputs are designed to maximise relevance and quality in the local context.

9) Strengthen the central role of the EKN in the co-ordination, monitoring and reporting of activities.
The expanded role of other Dutch ministries in support to water resource management in Mozambique can be constructive. A more 'entrepreneurial' mode of management, in which a few well-informed managers combine and deploy the larger number of instruments, funds and facilities now available, can work. The 'regie' team for Beira, and the overall 'delta' team for Mozambique, have proved this. At the same time, the overall composition, structure and modalities for Dutch development co-operation now confuse many stakeholders. From the majority perspective, co-ordination and reporting are incomplete. With the MFA still by far the largest source of Dutch funding for support to water management, and with the EKN indisputably the representative of the Netherlands in Mozambique, it is necessary to strengthen the Embassy's role and resources so that it can monitor and report comprehensively on all the work the Netherlands does in this sector. This should include all activities funded centrally by the MFA, as well as all activities funded through the RVO and other channels (including training and research funding, e.g. through Nuffic and NWO, the Netherlands Organisation for Scientific Research). In future, it should not be necessary for an evaluation like this one to have to pull together summary data from multiple sources. More importantly, it should be possible for the Dutch government and taxpayers to gain an easy overview of all the ways their resources are being used in this sector of development co-operation with Mozambique. A stronger co-ordination, monitoring and reporting role for the EKN should include additional resources (budget and staff) for more frequent field visits to activities that the Netherlands supports.

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Annexes

Annex 1 Extracts from the terms of reference

Theory of change

The inferred ToC for the implementation of the Netherlands water management policy in Mozambique over the period under review (Figure 1.1) takes into account the ToCs outlined in the overall ToR for the evaluation, in particular the two specific ones for water productivity and for water management planning and implementation. As is often the case when evaluators seek to identify the ToC of the programme they are reviewing, the design of that programme never specifically stated what the ToC was. It is therefore necessary to infer from the design documentation what the logic chain was and – the particular value of ToC analysis – to identify what assumptions were made about causal relationships. Covering a complex, extended set of interventions, this single ToC diagram only offers a summary presentation of design over the 11-year review period. Thus, for example, activities like dialogue, consultation, institutional development and policy development are expected to take place at multiple levels, from local water user groups (WUGs) to national government authorities. Outputs and outcomes, too, may be at local, catchment or national scale. The arrows representing causal links from left to right across the logic chain are schematic only.

Overall, this inferred ToC for the implementation of Netherlands policy on water management for development in Mozambique is thus a generic, schematic attempt to indicate some of the main elements of the overall logic chain and to identify some of the main assumptions made in the evolving design of the programme between 2006 and 2016. It broadly resembles those developed earlier in the ToR for the Bangladesh and Indonesia case studies that form part of this evaluation. Like them, it emphasises (under 'inputs') that Dutch funding and expertise must be combined with those coming from Mozambique and elsewhere for the programme's objectives to be achieved. This is considered important, as a reminder that the Netherlands-funded programme was not an isolated effort and that one of the assumptions running through the ToC was that inputs by the Government of Mozambique (GOM) and other development partners would be available and complementary to the Dutch effort.

Unlike those other ToCs, the Mozambique one cross-references the intended impacts to the United Nations Sustainable Development Goals (SDGs). The SDGs were of course agreed in 2015, towards the end of our review period and after the most recent Mozambique MASP in that period was formulated (UN, 2017). But it seems appropriate, even though only retrospectively, to check the fit of the programme to this updated global development agenda, to which both Mozambique and the Netherlands have committed themselves. Another difference is the stronger emphasis placed in the Mozambique ToR on benefits for the Dutch private sector, shown in Figure 1.1 as one of the intended impacts.

Approach and principles

The evaluation approach will have the following main characteristics.

- Independence: the evaluation will take a neutral and unbiased approach, identifying weaknesses, problems and constraints in a constructive manner, noting successes and achievements and drawing relevant conclusions from negative and positive findings.
- Ethics: this independent study will adhere to high standards of evaluation ethics. All interviewees will be assured of confidentiality. Informant opinions will not be attributed by name in the evaluation report (although a list of persons interviewed will be annexed), and interview notes will be kept strictly confidential. All interviewees, including beneficiaries and other field informants, will be asked for their consent before the discussion proceeds.
- Gender: data will be recorded and reported by gender where feasible and relevant. All parts of the evaluation process will mainstream gender awareness and issues, so that there is a full opportunity to identify potential costs and benefits for women in the implementation of Netherlands water management policy in Mozambique.
- Beneficiary participation: beneficiaries of the programmes under review include poor rural water and land users as well as national and local policy makers, administrators and technical specialists. Although there will be limited scope during the field mission for direct interaction with beneficiaries in rural areas, every effort will be made to include the views of Mozambican beneficiaries, including field level staff, in the evaluation findings, either from direct discussions with them or from reports on other consultations with them.
- Triangulation: wherever possible, the evaluation will use two or more sources in order to cross-check, verify and substantiate its findings.

Methods

The study will be guided in answering the evaluation questions by the reconstructed, implicit theory of change shown in Figure 1.1. At the heart of this theory-based analytical method is the testing of design assumptions about the causal relationships between inputs, activities and results. The outcome of this analysis will be findings and conclusions about the appropriateness of design. If these are positive, extraneous factors must be identified to explain any shortfalls in achievement of objectives. Alternatively, some of the design assumptions may be found to have been inaccurate, suggesting lessons about more realistic ways to shape Netherlands support in order to achieve the desired results.

This will be a mixed methods evaluation.

- Quantitative data will be sought and used, to the extent possible, to establish basic statistics about the portfolio under review: for example, costs, (under) expenditure, disbursement rates, beneficiary numbers and efficiency variables. Limited time and resources will be available for the interrogation and analysis of EKN, MFA and other

databases for this purpose. To the extent possible and appropriate, existing quantitative analysis will be sourced and incorporated in the evaluation.
- Extensive use has already been made of MFA and other databases on the portfolio under review, showing the numerous activities funded from various sources and implemented by various agencies over the ten-year period.
- Much further effort will be devoted to assessing the character and performance of these activities. Review of the available documentation will be a major part of the evaluation process: studying design, monitoring, progress, completion and (where they exist) evaluation reports on each activity, along with the broader literature on water management challenges and achievements in Mozambique and the Netherlands contribution in this area.
- Information and opinions obtained from informants will be an essential complement to, and cross-check against, findings from data and documentation. As emphasised above, the evaluation will make an effort to learn the opinions of programme beneficiaries at all levels, as well as interviewing the conventional 'key informants' at the offices of various ministries and agencies in Maputo. Semi-structured interview techniques, using pre-prepared interview schedules, will be used for this purpose. The evaluation matrix refers repeatedly to the conventional 'key informants', who will include:
  - staff of the MFA and other ministries and agencies (such as RVO and the Netherlands Water Partnership) in the Netherlands;
  - experts on the Mozambique water management sector, and on Dutch support for that sector, in the Netherlands, Mozambique and elsewhere – including academics, consultants and staff of research institutions and NGOs;
  - staff of the EKN in Maputo;
  - staff of the relevant ministries and agencies in Mozambique, primarily in Maputo but to the extent possible also at field level;
  - development partner personnel in Mozambique – bilateral and multilateral donor organisations, and relevant national and international NGOs.

Organisation and planning

Team

The team for this country case study will comprise:

- the international consultant to IOB with responsibility for the three country case studies (lead author for the Mozambique country case study report);
- the IOB evaluator with overall responsibility for data gathering and management in this evaluation;
- a local consultant with expert knowledge of water management in Mozambique.

Schedule

The proposed schedule for the evaluation is as follows.

Table I.1. Mozambique country case study schedule

Activity	Date
Data and document review, ToR preparation	September 2016-February 2017
Evaluation mission, Mozambique:	13-24 March 2017
Briefing meeting, EKN, Maputo	13 March
Interviews, data and document collection, Maputo	14-17 March
Travel to field	19 March
Beira and Tete visits	20-22 March
Return to Maputo	22 March
Further interviews, data and document collection, Maputo	22-23 March
Debriefing presentation, EKN, Maputo	24 March
Draft report preparation	April-May
Draft report submission	1 June
Review of draft report, comments to evaluation team	1-15 June
Report revision	16-20 June
Final country case study report	1 July

Annex 2 Evaluation matrix

Table II.1 Evaluation matrix

Evaluation question	Analysis and indicators	Main sources of information	Data collection methods
Policy cycle			
1. What was the rationale for Netherlands assistance to water management in Mozambique?	Analysis of Mozambique social, economic, environmental, institutional context Analysis of Netherlands-Mozambique relations Analysis of Netherlands policy on development co-operation with Mozambique Analysis of Netherlands water policy (global and for Mozambique) before and during review period	General literature on Mozambique economy, society, environment, water sector Literature on history of Netherlands-Mozambique relations and on Dutch development co-operation strategy for Mozambique Documentation on Netherlands water policy Key informants	Document review Interviews
2. To what extent, and how, was evolving Dutch water management policy reflected in engagements with Mozambique?	Analysis of Netherlands policy Analysis of EKN Maputo MASPs Analysis of project design, implementation, evaluation reports Review of conformity/adaptation/divergence	Netherlands policy documents EKN Maputo MASPs Project documents, including evaluation reports where available Key informants	Document review Interviews
3. Did Dutch support for water management in Mozambique achieve an appropriate balance between water productivity and water security and safety initiatives?	Analysis of Mozambique context Analysis of EKN Maputo MASPs Analysis of project design, implementation, evaluation reports Review of key informant opinion Determination whether balance of effort matched needs in the respective intervention areas	General literature on water management issues in Mozambique EKN Maputo MASPs Project documents, including evaluation reports where available Key informants	Document review Interviews
4. What modalities, instruments and mechanisms did the Netherlands use in support to water management in Mozambique?	Analysis of intervention design, implementation, evaluation reports across all modalities, instruments and mechanisms Check against full suite of intervention tools available through the review period	Project and other intervention documents Key informants	Document review Interviews

Table II.1 Evaluation matrix

Evaluation question	Analysis and indicators	Main sources of information	Data collection methods
5. What were Netherlands expenditures on water management activities in Mozambique, by year, by targeted geographic area (if applicable), by policy objective and by channel? What proportion of the expenditures was spent on contracts with Dutch water sector stakeholders?	Analysis of EKN and DGIS and other central databases, including those for programmes managed by RVO	EKN, DGIS, RVO and (if relevant) other databases	Collection of expenditure data from the various official sources
6. How has Dutch support for water management in Mozambique been monitored and evaluated? What evaluations are available, and what are the main issues and lessons that they report?	Analysis of M&E approach and resultant data and evaluation reports for each intervention Overall review of M&E methods and systems to identify adequacy and lessons learned about optimum M&E approaches for the sector Check for lessons reported on most effective approaches, modalities and instruments Check for lessons reported on the elements and assumptions of the implicit ToC	Monitoring and evaluation documentation on each intervention in the portfolio Water management planning documentation (to check whether it reflects M&E findings) Key informants	Document review Interviews
Effectiveness			
Water productivity			
7. Did Dutch support contribute to an enhanced water management regime (appropriate infrastructure, technically appropriate and sustainable operating systems, transparent financial management and durable local institutions) for crop production in Mozambique?	Analysis of quality and efficiency of infrastructure in programme areas, assessed against period of operation Analysis of levels of participation by women and men and of management effectiveness of local water management institutions, over what period Review of reforms in consultation, planning, disbursement and construction procedures Review of key informant opinion (including field level staff)	Monitoring and progress reports from Netherlands-funded activities (Reported) opinions of intended beneficiaries Key informants	Document review Interviews

Table II.1 Evaluation matrix

Evaluation question	Analysis and indicators	Main sources of information	Data collection methods
8. Did Netherlands support to an enhanced agricultural water management regime contribute to increased water security and agricultural productivity in Mozambique?	Analysis of agricultural yield data in areas where water management funded by Netherlands-funded interventions Review of key informant opinion	Monitoring and progress reports from Netherlands-funded activities (Reported) opinions of intended beneficiaries Key informants	Document review Interviews
9. In Mozambique, did Dutch support enhance the national and local institutional environment for and capacity of water users for participatory and transparent operation and maintenance (O&M) of water infrastructure?	Review available analysis of institutional issues and developments in Mozambique water management Review available data on Review of key informant opinion	Analytical literature on institutional issues (Reported) opinions of intended beneficiaries Key informants	Document review Interviews
10. In Mozambique, did Netherlands support augment the abilities of individual farmers to use representation, knowledge and skills to improve their access to water and their on-farm (water) management?	Review available analysis of institutional issues in Mozambique agricultural water management, including changes to local water management organisations (WMOs) and to roles of government agencies Review of key informant opinion	Analytical literature on institutional issues Data and records on legislation and regulations and their implementation (Reported) opinions of intended beneficiaries Key informants	Document review Interviews
11. In Mozambique, did the implicit Netherlands theory of change with regard to support for water management make realistic assumptions about how such support would enhance water productivity?	Analysis of assumptions in implicit ToC and reported effects of interventions on water productivity through changing governance and support Review of key informant opinion	Analytical literature on governance and water productivity issues Programme monitoring and evaluation documents Key informants	Document review Interviews
Water management planning and implementation			
12. Did Dutch support contribute to a strengthened policy framework for water management planning and implementation in Mozambique?	Analysis of documented history of water management policy development and approval during and since review period Analysis of Netherlands role in water management policy development and approval Review of key informant opinion	Documentation on water management plan development and approval Documentation on Netherlands inputs to water management plan development and role in achieving plan approval Key informants	Document review Interviews

Table II.1 Evaluation matrix

Evaluation question	Analysis and indicators	Main sources of information	Data collection methods
13. Did Dutch support contribute to the development of competent, adequately resourced, legally authorized and effective institutions for water management planning and implementation in Mozambique?	Analysis of documented history of institutional development Analysis of documentation on water management institutions' capacity and resourcing Review of key informant opinion	Documentation on water management institutional development in Mozambique Documentation on water management institutions' resourcing and capacity Key informants	Document review Interviews
14. Did Dutch support promote the adoption by Mozambican water management institutions of the principles of IWRM, stakeholder participation, transparency, equity and environmental sustainability?	Assessment of Mozambican water management institutions' documented policy and programmes Review of key informant opinion	Documentation on water management institutions' policy and programmes Key informants	Document review Interviews
15. Did Dutch support promote the strategic and operational integration of water management, food security and economic development planning in Mozambique?	Analysis of Mozambican water management, food security and economic development plans, with particular reference to the Beira corridor and Zambezi valley Analysis of Mozambican water management food security and economic development programme implementation, with particular reference to the Beira corridor and Zambezi valley Review of key informant opinion	Documentation on water management, food security and economic development plans and related programme implementation Key informants	Document review Interviews
16. Did Dutch support contribute to approved water management plans in Mozambique?	Analysis of documented history of water management plan development and approval during and since review period Analysis of Netherlands role in water management plan development and approval Review of key informant opinion	Documentation on water management plan development and approval Documentation on Netherlands inputs to water management plan development and role in achieving plan approval Key informants	Document review Interviews
17. Are any such approved water management plans being implemented in accordance with IWRM principles and enhancing water and food security?	Analysis of programme implementation and evaluation (if any) reporting Review of key informant opinion	Programme implementation (and evaluation) reports Key informants	Document review Interviews

Table II.1 Evaluation matrix

Evaluation question	Analysis and indicators	Main sources of information	Data collection methods
18. In Mozambique, did the implicit Netherlands theory of change with regard to support for water management planning and implementation make realistic assumptions about how such management would be designed and implemented, and about the benefits it would achieve?	Analysis of assumptions in implicit ToC and reported levels of implementation and effectiveness of water management plans Review of key informant opinion	Analytical literature on water productivity issues Programme monitoring, completion and evaluation documents Key informants	Document review Interviews
Transboundary water management			
19. In Mozambique, did Dutch support contribute to strengthened institutional arrangements and formal agreements over TWM, and did these take into account global norms for international water resources?	Analysis of history of TWM arrangements (primarily between Mozambique, South Africa and Swaziland) before and during review period, and of effectiveness of Netherlands-funded interventions in this field Analysis of content of Netherlands-funded interventions to check for provisions for global norms Review of key informant opinion	Literature on TWM in southern Africa Programme monitoring, completion and evaluation documents Key informants	Document review Interviews
20. Did Dutch support in Mozambique contribute to a strengthened environment (political, institutional, infrastructure and O&M) for the implementation of TWM arrangements and agreements?	Review general and programme-specific literature (in particular, monitoring, completion and evaluation reports) for evidence of clear and agreed rights, roles and responsibilities; jointly agreed management initiatives Review of key informant opinion	Literature on TWM of river systems terminating in Mozambique Programme monitoring, completion and evaluation documents Key informants	Document review Interviews
21. Did the governments of Mozambique and other countries allocate budgets and/or take measures for the sustained implementation of TWM arrangements and agreements to which Netherlands support contributed?	Review of available budget data Review general and programme-specific literature (in particular, monitoring, completion and evaluation reports) for evidence of clear and agreed rights, roles and responsibilities; jointly agreed management and maintenance initiatives Review of key informant opinion	Available budget data from Mozambique and neighbouring riparian states Literature on TWM of river systems terminating in Mozambique Programme monitoring, completion and evaluation documents Key informants	Budget data analysis Document review Interviews

Table II.1 Evaluation matrix

Evaluation question	Analysis and indicators	Main sources of information	Data collection methods
22. In Mozambique, did Dutch support for TWM enhance water safety and security?	Analysis of general and programme-specific literature for evidence of linkages between Netherlands-supported TWM interventions and enhanced water safety and security (reduced flood risk and damage) Review of key informant opinion	Literature on TWM of river systems terminating in Mozambique Programme monitoring, completion and evaluation documents Key informants	Document review Interviews
23. In Mozambique, did the implicit Netherlands theory of change with regard to support for TWM make realistic assumptions about how such management would be agreed and implemented, and about the benefits it would achieve?	Analysis of assumptions in implicit ToC, reported levels of progress with and benefits of TWM, and factors influencing progress and benefits Review of key informant opinion	Literature on TWM of river systems terminating in Mozambique Programme monitoring, completion and evaluation documents Key informants	Document review Interviews
Cross-cutting issues			
24. Were gender, environment, climate change and other priority Netherlands policy themes effectively mainstreamed in Netherlands-supported water management initiatives in Mozambique?	Analysis of design documents and monitoring, completion and evaluation reports for Netherlands-supported water management initiatives to check whether priority policy themes meaningfully mainstreamed (versus superficially mentioned) Review of key informant opinion	Design documents Monitoring, completion and evaluation reports Key informants	Document review Interviews
25. Did Netherlands-supported water management initiatives in Mozambique maintain or improve water management benefits for, and levels of management participation of, women and lower income groups?	Analysis of programme monitoring, completion and evaluation reports for gender-specific initiatives and reporting, showing levels of women's membership and management participation and checking whether these are meaningful or 'token' indicators Analysis of general data on socio-economic trends affecting women and lower income groups Review of participant opinion Review of key informant opinion	Monitoring, completion and evaluation reports Socio-economic data and reporting, e.g. from research agencies Participants Key informants	Document review Interviews Focus group discussions

Table II.1 Evaluation matrix

Evaluation question	Analysis and indicators	Main sources of information	Data collection methods
26. Did implementation of Netherlands water management policy in Mozambique establish platforms for exchange of Dutch knowledge and skills and enhance the reputation, market profile and profitability of Dutch private sector engagement in the country?	Analysis of monitoring, completion and evaluation reports, including for RVO-managed initiatives, to establish roles and achievements of, and benefits for, the Dutch private sector and knowledge institutions, as well as contribution of these Dutch sectors to achievement of policy objectives in Mozambique Review of frameworks, structures, procedures and capacity for exchange of knowledge and skills Review of key informant opinion	Monitoring, completion and evaluation reports Key informants	Document review Interviews
Efficiency			
27. Was the Netherlands able to fulfil its role as expert, broker and diplomat in enhancing collaboration between concerned actors within the Dutch government, the Netherlands water sector and Mozambique, and enhance complementarity and synergy of activities?	Review evaluations of Netherlands-funded programmes and analysis of the Mozambique water management sector generally for assessments of Netherlands performance Assess perceptions of Netherlands performance in Mozambique among government, EKN, donor partner and civil society informants	Analysis of Mozambique water management sector and of Netherlands performance within the sector Key informants	Document review Interviews
28. Did the involvement of the Dutch water sector in Mozambique lead to information, knowledge and technologies that are relevant and useable in the Mozambique water sector?	Review progress, completion and evaluation reports on Dutch-funded interventions for evidence on sustainable transfer of information, knowledge and technologies Interview key informants in Mozambique water management sectors (including resource management specialists, geographic information services and knowledge institutions) for evidence on any such transfer	Analysis of Mozambique water management sector and of Netherlands contributions of information, knowledge and technologies Key informants	Document review Interviews

Table II.1 Evaluation matrix

Evaluation question	Analysis and indicators	Main sources of information	Data collection methods
29. Did the involvement of the Dutch water sector in Mozambique strengthen the commitment and activities of other donors, policy-making structures and/or implementing agencies in the Mozambique water sector?	Interview key informants in GOI, development partner agencies and civil society for evidence of any positive contribution	Relevant records on inter-donor consultation Key informants	Document review Interviews
30. What do available data show with regard to the cost per beneficiary and per unit of production benefit of Netherlands-supported water productivity activities in Mozambique?	Analyse progress, completion and evaluation reports on Dutch-supported water productivity interventions for evidence on these costs, including trends over the review period Consult key informants for any supplementary information	Project progress, completion and evaluation reports Key informants	Document review Interviews
31. What do available data show with regard to the cost and duration of achieving key water management planning support results, compared to the cost and schedules specified in the design of these interventions?	Analyse project completion and evaluation reports for evidence on cost overruns, delays, under-expenditure and early completion, together with explanatory factors Consult key informants for any supplementary information	Project completion and evaluation reports Key informants	Document review Interviews
32. In Mozambique, did the implicit Netherlands theory of change with regard to water management policy make realistic assumptions about how efficiently the policy could be implemented?	Analyse project progress, completion and evaluation reports, as well as EKN annual reports, for evidence on realism of ToC assumptions, in particular those linking activities to outputs Review of key informant opinion	Project progress, completion and evaluation reports Key informants	Document review Interviews

Table II.1 Evaluation matrix

Evaluation question	Analysis and indicators	Main sources of information	Data collection methods
Policy options[17]			
33. In Mozambique, how might the efficiency and effectiveness of Netherlands water management policy implementation be improved?	Analyse project completion and evaluation report reports, and relevant sector reviews, for recommendations on enhancing efficiency and effectiveness Analyse general trends in governance and management of water in Mozambique over review period Review of key informant opinion	Project completion and evaluation reports Literature on water sector reform and performance Key informants	Document review Interviews
34. In Mozambique, what are the options for maintaining mutually beneficial collaboration and sustainable outcomes in the water management sector in the anticipated policy and budgetary frameworks?	Analyse Netherlands and Mozambique policy statements on development co-operation generally and in the water management sector Analyse recent developments in development co-operation relations between the two countries Analyse progress/completion documentation on current and recently completed activities Analyse progress to date, and likely viability, of non-ODA modes of intervention by the Netherlands Review of key informant opinion	Policy statements Statements on development co-operation relations Project progress, completion and evaluation reports Key informants	Document review Interviews

[17] The overall evaluation ToR say that "an attempt to answer these questions will be made, based on the findings of the policy evaluation, by the responsible policy department(s) in collaboration with IOB". For this country case study, the questions are included in order to identify options that might be taken up in these overall discussions.

Annex 3 Project data

Table III.1 below shows the projects covered by this 11-year review that were implemented with bilateral Netherlands funding administered through the EKN. It shows the same set of projects presented in Table 3.1, ordered by start date. This chronological presentation helps to show the sequence of activities, and the varying thematic emphasis, over the review period.

Table III.1 Water management projects: delegated funding, 2006-2016: chronological

No.	Project Name	Start	End	Project budget EUR	Expenditures 2006-2016 EUR[18]
14548	IncoMaputo 2-PRIMA (Progressive Realisation of the IncoMaputo Agreement)	Aug 06	Dec 13	7.417,971	7,417,971
16706	WaterNet Phase 2B	Jan 08	Jun 13	3,105,000	3,105,000
19909	IPIA (Instituto de Promocao de investigacao em Aguas)	Apr 09	Dec 14	337,740	337,740
20248	Environmental Flows Zambezi	Jul 10	Dec 14	515,000	515,000
23928	TA Monitoring Protocol ASAS	Jan 12	Dec 13	17,981	17,981
25152	WaterNet Phase 3	Jan 12	Dec 17	5,790,563	5,403,964
24100	External Support in Pre-award Organizational Assessments	Apr 12	Dec 13	26,798	26,798
24083	Development of Water Program	Apr 12	Dec 14	129,726	129,725
24499	Cooperation ARA-Zambeze	Oct 12	Jun 19	5,957,000	4,255,239
24600	Sectoral Support Water ASAS	Oct 12	Dec 17	18,665,174	6,810,436
26782	Spearhead & Crosscutting BOF	Jul 14	Jul 18	1,257,809	602,277
26681	Support to ARA-SUL	Sep 14	Dec 17	525,000	498,725
29078	Water Productivity	Jul 16	Jun 18	1,561,057	1,561,057
29715	Implementation Beira Masterplan	Aug 16	Dec 21	1,500,000	492,902
29569/ 29729	WaterNet Phase 4	Dec 16	Dec 22	2,700,000	900,000
	Total		**EUR**	**49,506,819**	**32,074,815**

Table III.2 below gives more detail on the centrally funded activities that were summarised in Table 3.2. The 'Implementation' column combines information from project documentation and information obtained during the field mission in Mozambique.

[18] Note that some projects started recently, and will continue to disburse from their total budgets after 2016.

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
Water management in agriculture					
Agricultural development					
IWMI Comprehensive Assessment	Apr 02-Dec 09	WWF Dialogue on food, water and environment	Through the Comprehensive Assessment of Water Management in Agriculture, co-funded by NL, IWMI aimed to identify knowledge on WM and to evaluate benefits, costs and impacts of water development and challenges (IWMI, 2017). Mozambique was one of the countries involved. The book was published in 2007 (Molden, 2007).	N/a	Not significant
WWF Dialogue on Food, Water and Environment	Jan 04-Dec 08	IWMI comprehensive assessment GWP WANI Environmental Flows CIWA	WWF was one of the members of a consortium aiming to build bridges between agricultural and environmental communities on water resources issues. Local dialogues took place in the Lower Zambezi Basin on water allocation issues. The project came with 3 main solutions: • System of Rice Intensification (SRI) (WWF, 2007). • Small water structures, fitting in local context • Focus on water conflicts on local and national scale	Environmental Flows in the Zambezi. No evaluation found.	Not significant. The original project was planned until September 2005, but was extended three times (budget neutral)
Water productivity					

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
ASAP (Agricultural Smallholder Adaptation Programme)	Nov 12-Dec 17	(GIZ activities)	The Agricultural Smallholder Adaptation Programme (ASAP) was developed by IFAD to make smallholder farmers more climate resilient. ASAP has an activity in Mozambique on Pro-poor value chain development in the Maputo and Limpopo Corridors (PROSUL) to improve the climate-smart livelihoods of smallholder farmers in the Maputo and Limpopo corridors, comprising 19 selected districts in Gaza, Inhambane and Maputo Provinces (20,350 beneficiaries). Its expected outcome is a sustainable increase in the incomes of farmers producing irrigated vegetables, cassava and livestock including cattle, goats and sheep. (IFAD, 2017). PROSUL had a slow start, with many delays on signing agreements and receiving approvals, recruiting staff. Some preparatory activities have started. By May 2013, the project had not received any funds. By March 2014, the only activities executed were preparatory, no field activities. Main outputs were a baseline study, M&E operational, steering committee meetings, MOU signed. At outcome level there is evidence of improved institutional capacity. The 2015 mission reports positive progress. 20% of the planned funded was disbursed. Meteo stations in Gaza were installed or renovated, contracts were signed, farmer groups formed and trained. The mission report of the 2016 mission rates the overall project implementation as moderately satisfactory. Implementation covers all targeted areas, 56% of beneficiaries was reached by Nov. 2016. Disbursements were below target (34%).	Ongoing. According to the aide memoire of the 2013 supervision mission, both financial and physical delivery rates stood at 0%. IFAD reports lack of funds and administrative delays. The 2014 mission report stresses a potential liquidity crisis, since all resources were exhausted by that time. The 2016 mission report labels the project as an Actual Problem Project, but it is fairly on course to meet most of the targets.	Moderately significant (NL supports ASAP, not Prosul directly)

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
Water Grand Challenge: Securing Water for Food	Jan 14-Dec 19	Water Watch (Eleaf) Water Productivity Potential synergy with other NL acts: +/- (for both SWFF activities)	Securing Water for Food sources and accelerates innovations that enable the production of more food with less water and/or make more water available for food production, processing and distribution. The 4th call for proposals was launched in 2016 (SWFF, 2018). Innovations proposed and funded through the programme in Mozambique: • Future Water (Wageningen): The 3rd Eye: Flying Sensors support farmers' decision making. Provision of real time information (through drones) to farmers on water stress on their fields, in order to enhance the efficiency of resource use and boost productivity (period: Nov 14-Nov 17; commitment: EUR 322,211). Activity progress indicator (EKN): +/-. Appears to be successful, the technique is adapted and costs are low. So far, 2,000 households benefited (660 ha), 39% water reduction (SWFF, 2017a). • World Hope Int. (USA, VA): Low expandable greenhouse, primarily targeted at female farmers to boost agricultural output and optimise water productivity (period: Oct 14-Oct 17; commitment EUR 370,000). Activity progress indicator: no record. MTR SWFF: Project considered successful so far, growing time reduced by 30%. 2,000 end-users reached so far, saving 770,000 litres (SWFF, 2017b)	Ongoing. Technocratic, legal obstacles for flying drones resolved (license obtained). The SWFF sets strict sustainability targets.	Moderately significant, impact on water savings and end-users questionable.

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
(Sub) national water management					
(Sub) national water management planning					
no activities					
(Sub) national water management implementation					
(River) basin management					
IUCN Water and Nature Initiative (WANI)	Jul 01-Dec 12	GWP DUPC WaterNet Sustain-Africa	Central in the Water and Nature Initiative of IUCN stood the implementation of IWRM through an ecosystem approach within river basins. Its goal was to mainstream the ecosystem approach, in which the concept of environmental flows was key, into catchment policies, planning and management. Mozambique was one of the riparian countries of the Limpopo river basin in which WANI developed a demonstration project on managing flows for sustainable development (IUCN, 2009). Training was provided to Mozambican water managers. In addition, interventions in the upstream countries are expected to have a positive influence on Mozambique as a downstream country.	IUCN has an ongoing water programme focusing on IWRM implementation, good governance, inclusive green growth, infrastructure for climate change adaptation, ecosystems resilience and building partnerships. Examples are BRIDGE, WISE-UP to Climate, RKNOW, IBRRI and SUSTAIN Africa initiative (also Mozambique).	Not significant
Coastal development					
no activities					

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
Disaster management					
Dutch Risk Reduction Team (DRR)	Jun 13-Dec 17	ORIO PvW PLAMA	DRR executed a scoping mission on flood control in the Licungo Basin. Earlier work in the Limpopo Basin helped to shape the overall DRR approach.	Concepts of integrated flood management as advocated by mission included in project documents of intended investment projects with donors and in on-going projects; probably increased chances of Dutch companies in tenders; team leader now adviser on flood issues at GOM. Interesting market for NL.	Moderately significant
Transboundary Water Management					
SADC-HYCOS II	Mar 03-Dec 13	Flood Management and Mitigation Programme (FMMP) of the Mekong River Commission (MRC)	After the first phase (1998-2001), in which Mozambique participated as well, the country was involved in the second phase in which hydrological and meteorological data collection platforms were installed. The goal of the project was to establish capacity of countries involved to assess status and trend of water resources, by using these platforms and establishing hydrological databases and information systems. Main output: 43 Data Collection Platforms. Most planned outputs were achieved (Rhebergen, 2010). Project was severely delayed due to late signing of agreements and misunderstanding of MOUs.	Follow up: Database Piramide contains the activity 'SADC HYCOS phase III' (2009-2014) (activity no. 20097), but the project ended with a disbursement of EUR 0.	Not significant, conventional rain gauges could replace the advanced stations.

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
				Sustainability: Project output oriented; in combination with the delays the project faced, sustainability could not be assured within the implementation period. The country visit to Mozambique made clear that the results were far from sustainable. The stations were not placed or do not work anymore, and data were not provided. The stations are too advanced for the ARAs to operate and quality checks do not occur.	
CIWA World Bank 2013-2020 (Cooperation in International Waters in Africa)	Jul 13-Dec 21	Nile Basin Initiative	The World Bank administers a multi-donor trust fund for the Cooperation in International Waters in Africa (CIWA) programme, which was launched in 2011. The programme aims to support riparian countries in developing sustainable, inclusive and climate-resilient growth in transboundary river basins. One of these is the Zambezi river basin, of which Mozambique is a riparian country. The total amount allocated to the Zambezi River was EUR 13.4 million to support ZAMCOM and the Zambezi River Authority (ZRA), develop and improved basin plans, infrastructure (hydro-electricity at Batoka Gorge and rehabilitation of the Kariba Dam). The programme is assessed to be successful in strengthening cooperation in transboundary waters and advancing investments. In addition, the programme has been very cost efficient in its management (Pegasys, 2015).	The programme provides a range of support that helps to unlock the potential for sustainable and climate resilient growth within the continent by addressing the constraints to cooperative management and development of international waters (Pegasys, 2015, p. vii).	Significant

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
Cross-cutting policy themes					
Climate ((change) adaptation and mitigation					
LDCF for climate change (GEF-UNDP)	Sep 12-Dec 17		The Least Developed Countries Fund (LDCF) was established to support a work programme to assist LDCs in prepare and implement National Adaptation Programmes of Action (NAPAs). The NAPA for Mozambique was approved by the Council of Ministers in 2007 (MICOA, 2007) and implemented by the Ministry of Environment (UNFCCC, 2014). This project aims to integrate climate adaptation interventions in the NAPA (MICOA, 2007). The main aim in Mozambique is to reduce the number of human victims and the loss of properties; promote a culture of prevention; and; provide the country with the means for prevention and mitigation. Mozambique is placing special emphasis on the prevention of natural disasters and improving early warning systems. Adaptation measures are being implemented in the agricultural, fisheries, energy, environmental and water sectors, with particular attention being paid to the coastal zones and erosion control. The allocated budget was USD 200,000 (UNDP, 2017), but (as per March 2014) only less than USD 15,000 was provided by LDCF, where project costs were about USD 55,000. These projects were: • Adaptation in the coastal zone of Mozambique (US$ 5,000 from LDCF)	Ongoing	Not significant

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
			• Strengthening capacities of agricultural producers to cope with climate change for increased food security through the farmer field school approach (US$ 10,000 from LDCF) (UNFCCC, 2014). Evaluation does not provide evidence about the effectiveness of the implementation activities per NAPA, but progress seems slow and doubtful.		
Good governance					
Water Integrity Network (WIN)	Jul 14-Dec 17	ASAS	WIN was founded by IRC, SIWI, Swedish Water House, Transparency International and the World Bank Water and Sanitation Programme and is a network to promote water integrity, to reduce corruption and to improve water sector performance worldwide. Mozambique has a country programme executed by HELVETAS and partners focusing on the promotion of integrity in budget allocation and investment decisions in local service provision (WIN, 2017). The corruption scandals in Mozambique have offered opportunities for WIN. IRC became the implementing partner and progresses as planned. Although WIN claims that awareness of water-related corruption and ways to address it was enhanced, that coalitions were forged to address corruption and increase integrity and that diagnostic tools and methodologies to address corruption were used effectively, neither the staff nor the evaluation (Ahlers & Richert, 2015) were positive about the collaboration and achieved outcomes of the Network. In addition, a WIN mission report (WIN BTOR, 2016) claims that there is strong interest by EKN to continue supporting water integrity and to strengthen linkages to the bilateral water programme, while interviews reveal that communication between WIN and EKN was inadequate.	Potential institutionalisation / upscaling (+/-)	Moderately significant

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
			Commitment: EUR 400,000; Activity Progress indicator: - Challenge: has to walk a fine line (corruption/ transparency) and frequently does not manage to get its message across in a language that is understandable.		
Gender					
no activities					
Environment					
no activities					
Across water management themes					
Global Water Partnership activities					
Global Water Partnership	Jan 02-Dec 17	WaterNet WANI DUPC	Promotes IWRM, notably through Global Water Partnership Southern Africa (GWPSA), in 2000 launched as the first regional GWP centre, and the Mozambican Country Water Partnership (MCWP). GWPSA is a multi-stakeholder platform which advocates, facilitates and supports sustainable WRM in 12 countries of the SADC Region (Global Water Partnership Southern Africa, 2017). Mozambique engaged in national climate change strategy development (dialogues, UNDP projects) (MTR GWP 09-13). Mozambique, and specifically the Limpopo river, was involved in the Water, Climate and Development Programme (WACDEP) (MTR 09-13). GWP conducted case studies on: • 'Institutional roles in the management of the Komati River Basin', • 'Innovative methods in water management decentralisation', • the transboundary case 'IWRM implementation at Pungwe River Basin in Zimbabwe and Mozambique' (Global Water Partnership Southern Africa, 2012).	Sustainability: the several initiatives to integrate IWRM have resulted in plans and awareness.	Significant

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
			Furthermore, GWPA organised a meeting with UNDP in Maputo (2013) to discuss the post-2015 water agenda (GWPSA, 2013). Also, NL has supported a GWP programme (2005-2011) 'IWRM Planning Process in 6 countries', of which Mozambique was one (Munguambe *et al.*, 2012). For Mozambique, a National Water Resources Management Strategy was developed and approved, though implementation was delayed due to inadequate funding (according to DNA) and due to misunderstanding of the cooperation of Mozambique Country Water Partnership (MCWP) and DNA. Several studies were facilitated by MCWP: • Capacity building plan for the water sector in Mozambique; • Stakeholders' analysis for the establishment of Licungo River Basin Committee; • Financing Water Resources Management in Mozambique; • Mainstreaming Gender into the Mozambique IWRM Plan; • Setting up River Basin Committees: Learning from Pungwe, Licungo, Rovuma and Zambeze River Basin Committees in Mozambique; • Guidelines for Stakeholder Identification and Analysis for setting up River Basin Committees in Mozambique; • Impact of Climate Change on Water Resources; • Integrating IWRM into National Development Planning in Mozambique (Munguambe *et al.*, 2012).		

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
Knowledge institutions' activities					
WaterNet	Apr 05-Sep 10	UNDP Cap/Net DUPC WANI	WaterNet is a programme for the SADC region to enhance institutional and human capacity in Southern Africa in the field of Integrated Water Resources Management (IWRM) through training, education, and research by harnessing the complementary strengths of institutions in the region. Mozambican students have been involved in the programme. Overall, the WaterNet programme did very well in delivering on its mandate and objectives. The mandate and objectives are in line with the overall strategic direction of the SADC Water Sector and AMCOW (Pegasys, 2011).	In order to remain effective, the secretariat needs to play a strong coordination role. Impacts are not clear. Follow-up: WaterNet phases 3 and 4 (which are delegated activities!).	Significant
Programmatic support for UNESCO-IHE (Partnership for water education)	Jan 02-Dec 20	WaterNet GWP WANI PRIMA ASAS (staff members) Water Productivity Partners for Water Support to the ARAs	Through DUPC (DGIS-UNESCO-IHE Programmatic Co-operation), support is provided for UNESCO-IHE activities in many countries to try to find a solution to the lack of water management capacity in Africa and the Middle East. This must be achieved through education, research and innovation, supporting regional and local partnerships and policy forum activities (bemo 17133). Amongst others, activities in Mozambique are: • Transboundary data and rainfall prediction based on internet data sources; • VIA Water innovation programme; • POWER2FLOW, hydropower-to-environment water transfers in the Zambezi Basin; • Risk-based operational water management for the Incomati River Basin, surface and groundwater; • Water Mondiaal Workshop (UNESCO-IHE, 2015).	Ongoing. The DUPC Programme is not yet in a position to sustain itself.	Significant

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
			(Total commitment: EUR 436.514.) Of the whole DUPC program, the partnership development was most effective in contributing to the stated objectives. Internal cohesion was not sufficiently demonstrated, which has gone at the expense of transparency and accountability at the level of outcomes and impact. The programmatic funding facilitated a high level of flexibility, which has not always been good for effectiveness. Flexibility on the other hand, has made it possible to collect many valuable experiences. The M&E system does not provide good data for the evaluation of progress and impact, but progress monitoring at an output and activity level are of an outstanding quality. Efficiency: there have been delays because of governance and administrative problems at IHE. The country visit revealed the success of the programme in terms of impact. Many staff members of governmental and other institutions appeared to have received education from IHE. Problem for the governmental institutions, especially the central government (DNA), is educated staff leaving for better-paid jobs at NGOs or in the private sector, but also decentral governmental institutions like the ARAs. Another UNESCO-IHE project is the IHE Water Sector Capacity Building in support of the MDGs (WaterMill), executed in 2004 to 2009. WaterMill educates local experts at postgraduate (MSc) level on environmental science, water management, municipal water and infrastructure and water science & engineering. In Mozambique research was conducted on good governance (van der Zaag *et al.*, nd).		

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
Multi-donor trust funds					
Water Partnership Programme (WPP)	Jan 09-Oct 16	Beira Master Plan Environmental Flows CIWA	'The Water Partnership Program (WPP) is a partnership between the World Bank and the governments of the Netherlands, the United Kingdom, Denmark, and Austria, working together to end poverty and boost shared prosperity through support to investments and analytical work in the water sector.' (WPP, 2016, p. 13). Activities conducted in Mozambique are Water Expert Team (WET) assignments on disaster risk management such as reduction of flooding hazards and flood control and urban planning in Beira like the rehabilitation of the drainage system in the city (WPP, 2016). WPP also financed a multi-sector investment options analysis for the Zambezi. Effectiveness: Overall, WPP has produced new knowledge and tools reducing poverty through improved WRM, WSD and climate resilient green growth. WET activities have been very helpful.	Knowledge products developed by WPP are often used by clients once activities are completed. Follow-up: rehabilitation of drainage system Beira.	Significant
Promotion of engagement of Dutch water sector					
NWP Young Expert Programme (YEP)	Nov 12-Sep 17	ASAS SWFF Support to ARAs	This programme is for young Dutch and developing country professionals to work on projects in the water and food security sectors. In Mozambique, 12 young experts, 8 Dutch and 4 Mozambican, were active or have graduated from the programme in the water sector in Mozambique. They worked for WE Consult, Vitens Evides International, Resilience B.V., Mobile Water Management, Waste, Waterschap Hunze en Aa's and Denys Engineers & Contractors B.V. (YEP, 2017).	Ongoing. Perspective for continuation: + Potential institutionalisation / upscaling: +/- Difficult to keep YEP people after the programme ends.	Significant

Table III.2 MFA centrally funded activities with links to Mozambique

Activity name	Period	Links with other Netherlands-funded activities	Implementation	Follow up, sustainability	Significance for co-operation benefits[19]
			Activity progress indicator (EKN): + Commitment Mozambique: EUR 640,000. Local as well as Dutch institutions, both private and public, are very positive about the programme, which helps the involved institutions to build their capacity.		

[19] This assessment of relevance is based on the evaluation team's interpretation of responses from EKN informants and other Indonesia stakeholders.

Table III.3 below presents a quick scan of water resource management activities supported through PvW during the review period. PvW subsidies and commissions in the fields of drinking water and sanitation are excluded. The information is incomplete; blank cells represent cases where it was not possible to get any data. Comments on implementation, links, follow up and sustainability are based on interviews in Maputo and on the qualitative assessment of the evaluation team.

Table III.3 Water management activities supported through Partners for Water

Type	Project no.	Start	End	Applicant	Full title; objective	Implementation as planned?	Links with other co-operation activities	Follow up	Sustainability	(Potential) significance for cooperat ion benefits with Mozambique[20]	Original commit-ment (EUR)	Disburse-ments (EUR)
Subsidy	05A017	Mar 06	Dec 07	Arrakis	Transfer of technology and market introduction of affordable water supply systems to smallholders	Training assembling wind pumps, drill teams. Demonstrations Ground water supply systems Microfinancing.	ADPP Jatropha project	Technologies translated and schools started	Other projects in which the same technologies are applied	Significant	110,709	107,634
Subsidy	07075	Apr 08	Sep 09	CDP B.V.	Commercial and technical development of flood irrigation – technological answer on climate change for river deltas in Mozambique	Executed according to revised proposal, outputs and objectives are met (flood irrigation design and evidence of irrigation opportunities)		Consortium has been in negotiation on several follow up projects in Mozambique.	Guaranteed maintenance and operation of infrastructure	Moderately significant	119,833	117,281
Subsidy	S11007	Oct 11	Mar 13	Caris Geographic Information Systems BV	Coast Map IO Database	Development database and training in Beira. All objectives were met.	Coast Map IO in other countries	INAHINA developed database for Quelimane independently	Projects emerged from this activity	Moderately significant	75,547	73,935
Subsidy	S11053	Jan 12	Sep 14	Wageningen University	Messica Irrigation Project	Pilot, innovative institutional model. Successful, spin-off for other irrigation projects.	PROIRRI	Was a spin-off for two PROIRRI (World Bank) projects focusing on capacity building and research and rice irrigation.	Other irrigation initiatives started	Significant	418,225	383,424

Table III.3 Water management activities supported through Partners for Water

Type	Project no.	Start	End	Applicant	Full title; objective	Implementation as planned?	Links with other co-operation activities	Follow up	Sustainability	(Potential) significance for cooperat ion benefits with Mozambique[20]	Original commit-ment (EUR)	Disburse-ments (EUR)
Commission	A120005	Aug 12	Oct 12	Alterra	Linking Food Security and Water for Green Economic Growth	Report with opportunities in water, food security and production. Proposal for integrated service provision	PROIRRI	By World Bank (PROIRRI)	Has led to a proposal on integrated services provision concerning irrigation in Mozambique	Significant	24,416	23,860
Commission	A120010	Nov 12	Dec 12	Atlantico Business Development	Study port development Atlantico					Moderately significant	19,950	19,947
Commission	A120014	Jan 13	Apr 13	Lamoree Management en Advies	Water Platform Mozambique	Yes. NL and Moz members, events, documents, studies.	PLAMA	PLAMA was developed	Questionable (when Dutch supports ends)	Significant	24,991	24,164
Commission	A120017	Jan 13	Mar 13	RoyallHaskoningDHV B.V.	Study port development RHDHV	Conducted	Beira Master Plan	Implementation BMP		Significant	19,813	19,504
Commission	A120013	Feb 13	Aug 14	Stichting Deltares	Beira Master Plan	Yes, plan developed	Beira Master Plan	Implementation BMP		Significant	776,136	776,136
Commission	A13002	Feb 13	Dec 13	Lamoree Management en Advies	Process management consultant Beira Master Plan	Yes	Beira Master Plan	Implementation BMP		Significant	111,393	111,393
Subsidy	S13001	Mar 13	Oct 14	FutureWater	Water Planning Tools to Support Water Governance	Several assignments. Flying sensors in USAID project and water allocation models Umbeluzi.	USAID's SWFF Water Grand Challenge	Provision of office logistics by WEConsult	Turns out to be cost effective and useful for farmers	Moderately significant	310,879	310,879
Commission	A13009	Apr 13	May 13	EKN	Costs mission Zambezi	Mission, report with results Zambezi and Licungo	Water OS2 Water Productivity	Several initiatives Licungo and Zambezi		Significant	17,975	12,547

Table III.3 Water management activities supported through Partners for Water

Type	Project no.	Start	End	Applicant	Full title; objective	Implementation as planned?	Links with other co-operation activities	Follow up	Sustainability	(Potential) significance for cooperat ion benefits with Mozambique[20]	Original commit-ment (EUR)	Disburse-ments (EUR)
Commission	A13006	Apr 13	May 13	Consultec	Technical Assistance Zambezi valley	Scoping mission and report	Water OS2 Water Productivity	• Mitigation of floods by Cabora Bassa dam, start of development of a master plan, but won by a Portuguese consultant, which hampered the start of master plan; • Capacity building ARA-Zambeze; • NUFFIC project; • World Bank projects on flood management (land use, settlement planning); • Water productivity.		Significant	8,298	8,298
Commission	A13007	Apr 13	May 13	Waterwys	Technical Assistance Zambezi Valley	Scoping mission and report	Water OS2 Water Productivity	Scoping report Arcadis (2014)		Significant	22,975	22,975
Commission	A13008	Apr 13	Jul 13	COWI Mozambique	Technical assistance Zambezi Valley	Scoping mission and report	Water OS2 Water Productivity			Significant	9,025	7,913

Table III.3 Water management activities supported through Partners for Water

Type	Project no.	Start	End	Applicant	Full title; objective	Implementation as planned?	Links with other co-operation activities	Follow up	Sustainability	(Potential) significance for cooperat ion benefits with Mozambique[20]	Original commit-ment (EUR)	Disburse-ments (EUR)
Commission	A13004	May 13	May 13	Asociacao Aquashare	Silusba	Official sponsor.	PLAMA and other PvW projects			Significant	7,813	7,813
Commission	A13016	Jun 13	Dec 13	Lamoree Management en Advies	Water Platform	Yes. NL and Mozambican members, events, documents, studies.	PLAMA	PLAMA developed, supported several initiatives	Questionable	Significant	14,991	14,991
Commission	A13019	Jul 13	Jun 15	Nelen & Schuurmans B.V.	Visualisation tool to support decision making on financing the Beira Master Plan	Yes	Beira Master Plan	Implementation BMP		Significant	84,975	84,975
Commission	A13025	Dec 13	Dec 14	Lamoree Management en Advies	Attendance Beira Corridor Conference	Yes	Beira Master Plan	Implementation BMP		Significant	1,178	1,178
Commission	A14008	Jan 14	Jan 15	Lamoree Management en Advies	Process management services Beira	Yes	Beira Master Plan	Implementation BMP		Significant	117,182	73,582
Commission	A14068	Jan 14	Aug 14	Arcadis B.V.	-						39,860	39,010
Subsidy	S13031	Jan 14	Jun 15	Stichting Deltares	Green infrastructure solutions for solving Beira's storm water problems	Yes. Showcase of Dutch knowledge and pilot for other cases.	Beira Master Plan	Solutions will be applied in other countries. In Sofala province moving to implementation and setting to scale.		Significant	394,408	367,020
Commission	A14003	Jan 14	Apr 14	Lamoree Management en Advies	Guidance donor conference BMP	Conference held, very successful	Beira Master Plan	Collaboration parties in BMP		Significant	36,893	36,893

Table III.3 Water management activities supported through Partners for Water

Type	Project no.	Start	End	Applicant	Full title; objective	Implementation as planned?	Links with other co-operation activities	Follow up	Sustainability	(Potential) significance for cooperat ion benefits with Mozambique[20]	Original commit-ment (EUR)	Disburse-ments (EUR)
Subsidy	S14044	Mar 14	Nov 15	Mobile Water Management	Mobiel Water Meten	20 locations instead of 300, though at strategic places.	VIAWater	Collaboration with drinking water supply company, projects in South Africa and Sugar irrigation scheme in Mozambique	Project turned out to be a governance issue, resulting in a lower effectiveness. Meter readers' salaries are very low; actual data collection is less than appears; system needs to be overhauled.	Not significant	272,306	257,817
Commission	A14051	May 14	Nov 14	Port Consultants Rotterdam	Frank Maasson	Yes	Beira Master Plan	Implementation BMP		Significant	24,500	24,500
Commission	A14057	May 14	Aug 14	RebelGroup Advisory B.V.	Inventarisation Dutch Investors land development company Beira	Transaction model and roadmap. Advise to GON not to participate in LDC.	Beira Master Plan	Process manager commissioned who operates on behalf of GON		Significant	20,419	20,419
Commission	A14049	May 14	Dec 14	Wissing B.V.	Beira support BMP	Yes	Beira Master Plan	Implementation BMP		Significant	24,500	24,500
Commission	A14065	May 14	Aug 14	Wissing B.V.	Bird's eye view Beira	Yes	Beira Master Plan	Implementation BMP		Significant	6,290	6,290
Commission	A14050	May 14	Mar 15	Water=Essential BV	Market study Mozambique	Yes, market scan Beira executed	Beira Master Plan	Implementation BMP		Significant	49,317	45,567

Table III.3 Water management activities supported through Partners for Water

Type	Project no.	Start	End	Applicant	Full title; objective	Implementation as planned?	Links with other co-operation activities	Follow up	Sustainability	(Potential) significance for cooperat ion benefits with Mozambique[20]	Original commit-ment (EUR)	Disburse-ments (EUR)
Commission	A14055	May 14	Dec 14	Waterwys	Technical Assistance for the Limpopo Basin in Mozambique	TA	Several initiatives, also other donors; strategic river in TWM	Strategic study for Limpopo flood management	Financial constraints, floods remain problem in Mozambique due to (amongst others) cooperation issues with other countries.	Moderately significant	24,491	7,260
Commission	A14060	Jun 14	Dec 14	Port Consultants Rotterdam	Adjustment BMP	Yes	Beira Master Plan	Implementation BMP		Significant	7,500	7,500
Commission	A14096	Oct 14	Dec 14	RebelGroup Advisory B.V.	-	Transaction model and road map land development company	Beira Master Plan	LDC agreement		Significant	4,538	4,538
Commission	A15008	Feb 15	Aug 15	Port Consultants Rotterdam	BC Port and Industry	Report to develop land development company	Beira Master Plan	LDC agreement		Significant	49,913	49,913
Commission	A15011	Feb 15	Jun 16	Lamoree Management en Advies	Process Management Consultant Beira Masterplan	Yes	Beira Master Plan	Implementation BMP		Significant	135,655	135,655
Commission	A15032	May 15	Jul 15	Wissing B.V.	Elaboration of an urbanisation plan for the residential expansion areas in the Maraza area, Beira	Yes, plans for water retention and drainage	Beira Master Plan	Plans implemented		Significant	46,300	46,300
Commission	A15033	May 15	Jul 15	Port Consultants Rotterdam	-	Yes	Beira Master Plan	Implementation BMP		Significant	39,905	39,905

Table III.3 Water management activities supported through Partners for Water

Type	Project no.	Start	End	Applicant	Full title; objective	Implementation as planned?	Links with other co-operation activities	Follow up	Sustainability	(Potential) significance for cooperat ion benefits with Mozambique[20]	Original commit-ment (EUR)	Disburse-ments (EUR)
Commission	A15056	Jul 15	Dec 15	Port Consultants Rotterdam	Land development company Joint Venture shareholding agreement of the FMO	Yes, agreement signed	Beira Master Plan	Dredging of port, use of sand in Beira.	LDC will be key in Beira becoming self-sufficient.	Significant	18,200	18,200
Commission	A15074	Sep 15	Sep 15	Wissing B.V.	3D Image for Beira Investors conference of the residential expansion area in Maraza, Beira	Yes, plans for retention and drainage	Beira Master Plan	Plans implemented		Significant	5,500	5,500
Commission	A14129	?	?	Arcadis B.V.	-	Scoping paper integrated flood management for the Limpopo Basin	Several initiatives, also other donors; strategic river in TWM		Financial constraints, floods remain problem in Mozambique due to (amongst others) cooperation issues with other countries.	Moderately significant	9,965	9,965
Commission	A15009	?	Dec 15	RebelGroup Advisory B.V.	-	Transaction model and roadmap land development company	Beira Master Plan	Agreement signed		Significant	97,600	97,600

Table III.3 Water management activities supported through Partners for Water

Type	Project no.	Start	End	Applicant	Full title; objective	Implementation as planned?	Links with other co-operation activities	Follow up	Sustainability	(Potential) significance for cooperat ion benefits with Mozambique[20]	Original commit-ment (EUR)	Disburse-ments (EUR)
Commission	A15044	?	Jul 15	AIDEnvironment	Merge, edit, control 2 reports	Compilation of two studies: the 'Positioning Survey for the Dutch Water sector in Mozambique, (AidEnvironment) on behalf of the Water OS program, and the 'Market study Water sector Mozambique' (Water = Essential)	WaterOS, PLAMA, Beira Master Plan			Significant	9,075	9,075
Commission	A15089	?	Nov 15	Waterwys	Support / preparation visit of Minister of Public Works to the Netherlands during AIWW	Sign grant arrangement for the implementation, operation and maintenance of the Greater Maputo Water Supply Expansion Project (World Bank and FIPAG).	FIPAG			Significant	9,916	9,274
Total											**3,623,355**	**3,465,129**

[20] This assessment of significance is based on the evaluation team's interpretation of responses from EKN informants and other Mozambique stakeholders.

Annex 4 Persons met

The list below includes persons who were interviewed by telephone or Skype.

Table IV.1 Persons met

Name		Position
B. Aleobua	m	Water and Sanitation Engineer, African Development Bank
H. Aoki	m	Deputy Resident Representative, JICA
P. Aristóteles	m	Technician, Ministry of Economics and Finance
G. Bakker	m	Key adviser Water Aid and Development Programme Mozambique, EKN
H. Banze	m	Director, ARA-Sul
J. Chiburre	m	Sustain Africa
O.C. Covele	f	Technician, Ministry of Economics and Finance
V. Custodio	m	Director ARA-Zambeze
A. van Driel	f	First Secretary for Water and Sanitation, EKN
M. Feltmann	f	NWP-Team Mozambique
A.M. Gravata	m	Technician, Ministry of Economics and Finance
P. Grotenhuis	f	Ambassador, EKN
I. van Haren	m	Director, We Consult
P. van den Horn	m	Programme Manager International, Netherlands Water Partnership, The Hague
J. Huesken	m	Deputy Chief of Mission, EKN, Pretoria
G. Hunger	m	Project Co-ordinator (AMC-Climate Change Adaptation), GIZ
F. Huthoff	m	HKV, technical and strategic adviser to DNGRH
M. Inamori	f	Project Formulation Adviser (Environment, Water Resource Management, Natural Disaster Management), JICA
J.M. Kileshye Onema	m	Network manager WaterNet
K. van Krieken	f	Department for Water and Sanitation, EKN
B. Kuijper	m	Deputy Operations Director, Cornelder (Beira Port)
H. Jansen	m	Former WRM specialist EKN
C. Jordão	f	Senior Policy Officer for Sustainable Development, EKN
E. dos Santos Jose	f	Deputy National Director of Treasury, Ministry of Economics and Finance
D. Juizo	m	Consultant, Solomon; Lecturer, Eduardo Mondlane University
I. Klaassen	f	NWP-Team Mozambique
P. Letitre	m	Deltares Representative in Indonesia, Jakarta

Table IV.1 Persons met		
Name		**Position**
M.J. Macaringue	m	President of The Board, PLAMA
M. Macie	m	National Director, DNGRH
F. Marerua	m	Former Country Director WWF in Mozambique and Policy and Partnership Advisor Coastal East Africa based in Dar es Salaam
S. Massuque	m	Programme Officer, JICA
T. Mbatsana	m	Civil and Transport Engineer, Cornelder (Beira Port)
R.E.J. Mendiate	m	Director for Studies and Strategic Analysis, ZVDA
R. Nhamucho	f	Director, AIAS
G. Pannekoek	m	NWP, TA to PLAMA
M. van der Pompe	m	Head of Development Co-operation/Deputy Head of Mission, EKN
I. Ramos	f	IUCN/SUSTAIN Africa, Mozambique
W. Rhebergen	m	Project Manager, WE Consult
N. Rodrigues	m	Technical Director, ZVDA
F. Saifodine	f	Policy Officer for Water and Sanitation, EKN
S. Saranga	f	Adviser, Ministry of Public Works, Housing and Water Resources
E. Sechene	m	Programme Officer/Agribusiness and Private Sector Development, EKN
D. Simango	m	Mayor of Beira
S. Sitoe	m	Head, Department of International Rivers, DNGRH
A. Carmo Vaz	m	Consultant, Consultec
C. Vicente	m	Director, Ara-Zambeze
M. Wishart	m	World Bank, Jakarta
R. Zacarias	f	Climate Change and WASH Adviser, DFID
O. van Zanten	m	Water Systems Adviser, Waterschap De Dommel

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Photo cover: Collection of water level data by a member of the technical team of ARA-Zambeze | ARA-Zambeze.

Photo Summary: The Zambezi river near Tete, the city where ARA-Zambeze is based | Stephen Turner.

Photo chapter 1: Headquarters of the National Directorate of Water (DNA) in Maputo | Pim de Beer.

Photo chapter 2: A woman started to work her land immediately after a flood of the Limpopo near Chókwe | EKN Maputo.

Photo chapter 3: Implementation design of a district in Beira, part of the Beira Masterplan | Port Consultants Rotterdam.

Photo chapter 4: ThirdEye: Flying Sensors to Support Farmers' decision making, supported through securing Water for Food | Future Water.

Photo chapter 5: Mr Daviz Simango, mayor of Beira, at a location where the Beira Master Plan is being implemented | Stephen Turner.

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